



The decision is yours, but only moments to choose...

Compared to the TSK ENDLESS QUEST Books other adventure tales are just a your. Because ENDLESS QUEST Books let you decide the action and outcome of every story. That's the difference of our Pick A Path To Adventure 'ormat, and if you've played DUNESCHOS' 6 DRAQONS' fantasy role playing games you know just how much adventure we mean. Cet into ENDLESS QUEST. Books and experience a new

ENDLESS QUEST BOOKS



Volume 59 Number 2 (Whole Number 523) July 1985

Amazing® Science Fiction Stories, ISSN 0279-1706, is published bimonthly by TSR, Inc., (201 Sheridan Springs Road) P.O. Box 110, Lake Geneva WI 53147, Single copy price: \$1.75, plus 50

cents postage and handling. Subscription rates: \$9.00 for 6 issues (one year) sent to U.S. addresses: for Canada subscription rates are \$11.00 for 6 issues. Subscriptions must be paid in advance in U.S. funds All subscription may yests. should be sent to TSR.

Inc., P.O. Box 72089,

Chicago IL 60690.

This magazine welcomes unsolicited submissions of written material or artwork.

All such submissions must be accompanied by a stamped self-addressed envelope of size sufficient to return unused submissions to the contributor. The publisher does not assume responsibility for submissions in any event.

AMAZING is a registered trademark owned by TSR Inc. and the AMAZING logo is a

trademark owned by TSR Inc. AMAZING® Science Fiction Stories copyright @ 1985 by TSR, Inc. All Rights Reserved. Printed in the United States of America. Reproduction or use of editorial or pictorial

content in any manner without express permission is prohibited. Second class postage paid at Lake Geneva, WI, and additional mailing offices.

Postmaster: Send address changes to TSR Inc. PO. Box 110 Lake Geneva WI 53147 Founded in 1926 by Hugo Gernsback . . .

July 1985

DEPARTMENTS

4 Robert Silverberg: Opinion

9 Robert Coulson & Frank Catalano: **Book Reviews**

24 The Readers Discussions

103 Raird Searles: Screen Reviews

128 George H. Scithers: The Observatory

FICTION

30 Javge Carr: Catacombs

55 R. A. Lafferty: Magazine Section

74 Darrell Schweitzer-The Last of the Shadow Titans

92 Steven Gould: Mental Blocks

108 Richard Grant: Lyric for the Darkmass

120 Dian Girard: Katzeniammer

129 WII Creveling: Bet 134 Eric G. Iverson: Unholy Trinity

FACT

Ben Boya: Space Weapons 65

COVER: Roger Raupp for "Space Weapons"

POETRY: John Gregory Betancourt, p91: David Langford, p102; Susan Palwick, p107; Tom Disch, p119: Lorna Crowe, p162

CARTOON, CARTOON: William Rotsler Alexis Gillliand p22

Opinion

by Robert Silverberg

Last issue I took up the question of the environmental-activist campaign against genetic engineering — a movement which threatens to sit in up a wave of anti-technological hysteria as vehement as the one that has effectively destroyed the nuclear power industry in the United States. Herewith some further details on the subject:

About a decade ago, botanists discovered that certain commonly founbacteria known as Pseudomonas syringae tend to act as catalysts for the formation of ice crystals on the leaves of plants. A plant that might otherwise go unharmed by frost down to a temperature of 23 degrees Fahrenheit or swill freze and die at 31 degrees if substantial colonies of Pseudomonas syringae exist on it.

In 1982, two University of California plant pathologists, Nicholas Panopoulous and Steven Lindow, found that a single gene - out of the 4000 making up each strand of Pseudomonas svringae DNA - was responsible for the ice-promoting characteristics of these bacteria. Working in conjunction with Advanced Genetic Sciences, Inc., of Oakland, California, a small genetic-engineering company, they developed a technique for snipping out the troublesome gene, thereby producing a strain of Pseudomonas identical in nearly all respects to the natural kind but lacking the capacity to induce the formation of ice. They nicknamed the artificially rejiggered bacterium "Ice Minus" and the natural form "Ice Plus."

The genetic engineers reasoned that, if "Ice Minus" were to be sprayed on fields of crops in areas of frost risk, it could displace the "Ice Plus" form and reduce the risks of agricultural loss. "There's no question that these efforts could hold great promise for farmers," declared the California Farm Bureau Federation. "Millions of dollars worth of damage are done each year to crops by frost." That figure applies just to the United States. Worldwide, the annual losses run to many billions.

First, of course, some field testing senecessary. The scientists applied to the National Institutes of Health's Recombinant DNA Advisory Committee for permission to conduct tests during the 1983 frost season, and in due time they were given the go-ahead for spraying a few gallons of a concentrated "microbe soup" on a quarter-acre plot in Siskiyou County, California, near the Oregon border.

Enter the environmental activists specifically, one Jeremy Rifkin, who has been campaigning against genetic engineering since 1977 with such books as Who Should Play God? and Algeny, Lining up the support of such groups as the Foundation on Economic Trends, Friends of the Earth, and the Wilderness Society, Rifkin took the National Institutes of Health to court, calling the proposed experiment "ecological roulette." Rifkin asserted that Pseudomonas syringae. which in its normal form is widespread in the atmosphere, might conceivably play an essential role in the earth's

CLOAKED IN AN AURA OF GODHEAD, UNEARTHLY FORCES DO BATTLE FOR THE SOUL OF MANKIN

PREPRIE

PIERS ATTHORY

0-812-53108-6 288 pages \$3.50 On Sale in May

TOR BOOKS & WE'RE PART OF THE FUTURE

climate through its ice-forming capacity. Who could say, Rikin asked, what climatic effects there might be if "Ice Plus" were replaced by the artificially created "Ice Minus" variety? For all anyone knew, worldwide droughts might result — or other, stranger consequences beyond our fathoming.

Rikin's onslaught startled Lindow and Panopoulous, who had spent three months preparing their NHI application and believed that all they meant to do was carry out a carefully controlled small-scale experiment with a notably unthreatening microorganism. The way Rikhin made it sound, they said, it would seem that they intended to spray "the entire North American continent with bacteria."

But the doughty Federal Judge John I. Sirica, the Watergate man, was impressed by Rifkin's arguments and handed down an injunction against NIH and the University of California prohibiting the experiment. There would be no release of genetically engineered organisms into the environment, said Judge Sirica, until a fullscale study of ecological consequences had been carried out. The Los Angeles Times hailed the decision as "a stunning victory for environmental activists," and a television news commentator described the experiment on the day of the injunction as making

use of "new life-forms with potentially catastrophic effects." And so the dreaded bacterium was not let loose. Catastrophe was averted; the Earth's climate will not be changed by the genetic engineers this month.

The "Ice Minus" form of Pseudomonas syringae, nevertheless, is about to have its field test in California. Perhaps the silliest aspect of this whole controversy came to light in mid-November of 1984 when Advanced Genetic Sciences let it be known that it would soon.beein outdoor testing of a naturally occurring mutant variety of the bacterium that also has the ice-inhibiting gene. Its existence has been known for some time, and in fact Lindow has already tested its frost-proofing abilities on a potato patch in Northern California. He did not think it was particularly dangerous to life on Earth, since it has existed naturally for millions of years without any evident negative effects. Since it was not produced by the dreaded genetic-engineering technique. it seems to be legal to give it a try. It is gene-splicing alone that stirs primordial fears, apparently.

rears, apparently, If "Ice Minus" was available all along in a natural mutant strain, why dot scientists go to the trouble of duplicating it in the genetics lab? Because, says, Advanced Genetic Sciences, the genetical great quantities and seem to be more stable when applied to plants in the field. It is, therefore, a better idea commercially Developing it also allows the gene-splicers to extend their reach and perfect their skills.

Toward what end, though? Will scientists ultimately succeed in setting horrifying organisms loose upon the world despite the best efforts of the Jeremy Rifkins?

Jeremy RiPkins?
I think not. I think genetic engineering is a science that will prevail over the obstructionists now crowding the courts. It offers so much that we can reafford to let it be swept away by panic and ignorance. Only a day after Advanced Genetic Sciences announced its "Ice Minus" plans, another California gene-splicing firm, Genentech, Inc., told the American Heart Association about a generically engineered blood-clot dissolver called TPA that it had recently tested on 49 patients who were in the throes of coronary attacks.

13 56 of them, the blood clots causing

A new novel of archaeological intrigue, international adventure and speculative science from the author of *TIMESCAPE*.

GREGORY BENFORD



In the ancient ruins of contemporary revolutionary Greece, young American archaeologist discovers a mysterious artifact, linked with pre-history and myth, which threatens worldwide catastrophe!

A TOR HARDCOVER

Distributed by St. Martin's Press On Sale in May 0-312-93048-8 \$16.95 576 pages

TOR BOOKS (A) WE'RE PART OF THE FUTURE

the attacks disappeared within 45 minutes after treatment. This promising drug is produced by splicing the human gene that controls the secretion of TPA into bacteria. No doubt some energetic activist, horrified by this unnatural and diabolical alliance of man and microbe, is at work at this moment on a legal brief that he hones will save us from this latest menace. But I suspect that it is too late: largescale clinical trials are underway from Japan to Europe, and the early reports from hospitals across the world are enthusiastic. It will be hard to keep such a drug out of use through para-

noia alone, if indeed it can spare millions from the threat of coronary blockage.

Certainly some regulation of genetic engineering is necessary and desirable. (And five government agencies are competing with one another right now for jurisdiction in the field of recombinant DNA) But I think the time of automatic opposition to any and all artificial life-form creation will soon be at its end. Once the manifest benefits of this startling new science are widely perceived, the purveyors of prophecies of doom will literally be laughed out of court.



Publisher: Mike Cook
Editor: George Scithers

Managing Editor: Patrick L. Price Graphic Designer: Ruth Hover

Advertising Sales Administrator: Andrea Lee Hein Production: Betty Elmore, Charles Ramsay, Roger Raupp

Book Reviews

by Robert Coulson

Dinner At Deviant's Palace by Tim Powers Ace, \$2.95 (paperback)

Powers has done it again; this is his third book in a row that's not only excellently written, but completely different from his previous material In this era of continued novels and series, I appreciate that. This time, the setting is a ruined and rebuilding southern California, Nuclear war is never mentioned, but a description of the "Ellay-Ex Deep," which is "reputed to glow with fantastic rainbow colors on some nights," is a pretty strong indication, Protagonist Greg Rivas, a "pelican gunner" (musician) and former redemptionist, is hired to "redeem" one more soul from the growing power of the new Messiah. Along the way, the reader discovers a national currency based on brandy, the strange activities of the Messiah's brainwashed disciples, the flying bloodsuckers called "hemogoblins" (one of those absolutely perfect names that only occur at rare intervals), the insane pocalocas, and the growing feeling that what's behind it all isn't exactly human. Powers has all of Heinlein's ability to fill in the background without disturbing the action. coupled with the complexity of van Vogt, and an ability to tie up loose ends. Read this one before voting on any of the awards for 1984.

The Faces of Science Fiction by Patti Perret Bluejay, \$11.95 (trade paperback), \$35.00 (hardcover)

This book of photos should interest any reader who wants to know what his or her favorite author looks like. There are limitations, the major one being that only residents of the U.S. are included. McCaffrey and Brunner fans are out of luck. Of those within the U.S., the roll of big-name authors and the old-timers is almost complete. I only noted Robert Heinlein, Harlan Ellison, and Lester del Rev among the missing. Another limit is that only living authors are included; all photos were taken in the spring of 1984. Inclusion of newcomers and smallname authors is spottier; with 84 people in all, someone had to be left out. Each author - or in three cases, couples -- was provided with one page in which to write whatever he or she wanted to. Studying what they chose to write about gives a better indication of their personalities than an interview or description would do.

The only flaws are the lack of an index (to locate a specific author you have to page through the book) and the limited number of people represented. The latter can be corrected by a sequel: I'd like to see some editors and artists included in the next book, if there is one. (Sure I'm in this one; why do you think I've given it such a good review?)

Moon-Flash by Patricia McKillip

Atheneum, \$10.95 (hardcover)

A short novel about growing up, and

Book Reviews

about a girl who has imagination and curiosity, and lives in a world with neither. I think it will strike a chord with a lot of science-fiction fans. The message is clear enough: not only that we have to leave childhood eventually but but that if you don't "fit in," look for a place where you will, or at least a place where you will, or at least a place where you dedities will be accepted. The adventures are nicely mingled with the protagoniat's doubts about the world and her place in it. A really excellent book for young adults —or even all one.

Sudanna, Sudanna by Brian Herbert

Arbor House, \$15.95 (hardcover)

This is mostly a satire on middleclass moralisy, the rebellion of youth, abuse of power, and suchlike worries of our time. I was reminded of some of the works of Stanton A. Coblentz, though Herbert has a much more sophisticated touch, as well as more inventiveness. I'm sort of lukewarm toward the satire; but the characters, who are memorable, unique, and impossible, intripued me. Though not an outstanding book, it's an interesting one.

The Fire Sword by Adrienne Martine-Barnes

Avon, \$3.75 (paperback)

Don't let the silly cover on this one

fiod you. This alternate-word novel is indeed about a woman's adventures in a barbaric land, but the heroine not only has more sense than to parade around in a bra and loincloth, she has a eness of humor as well, and that's unusual in this category. The setting is an alternate England in 1203 and learnate England in 1203 accept it (and of course she does), is to collect the required implements for dispelling the Darkness that has "

transported from our own world, she isn't particularly enthralled by all this, but performs it, commenting wryly on it as she does. It's quite entertaining. Sherlock Holmes Through Time

invaded the land. Since she's been

and Space edited by Isaac Asimov, Martin Harry Greenberg, & Charles Waugh

Blueiay, \$14.95 (hardcover) Fifteen fantasy stories involving the Great Detective, by an assortment of writers. It's an outstanding collection; the only story that I felt was unfortunately left out is "Venus, Mars, and Baker Street," by Manly Wade and Wade Wellman, (Sharon Farber's marvelous tale in the January Amazing® obviously couldn't have been included here.) My other old favorites are here: "The Adventure of the Misplaced Hound," the Hoka story by Anderson and Dickson, and "A Father's Tale" by Sterling Lanier. In addition, Anne Lear's "The Adventure of the Global Traveler" has just become one of my favorites. Phil Farmer's "A Scarletin Study" is a nice, pun-filled parody; and the stories by S. N. Farber, Barbara Williamson, Mack Reynolds, Edward Wellen, Fred Saberhagen, Gene Wolfe, Richard Lupoff, James Powell, Isaac Asimov, and another one by Farmer are all good to excellent. There is one of the original Doyle stories, which I'm not sure is fantastic enough to deserve inclusion; but at least it sets the scene. Recommended.

A History of the Hugo, Nebula, and International Fantasy Awards by Donald Franson and Howard Devore Howard Devore, 4705 Weddel St., Dearborn MI 48125, \$6.00 (trade)

The title pretty much covers it.

BIO OF A SPACE TYRANT VOLUME III: POLITICIAN.



Ther's a short article on each award, and listings of winners, nominees, and vote totals on the rare occasions when the latter were released to the public. This 1985 edition covers the Hugo through 1994, the Nebula through 1993, and the complete list of International Fantasy Awards, which ran from 1991 through 1991 through 1991 through 1991 through 1991. A valuable research volume for librarian or interested reader.

Masques

edited by J. N. Williamson Maclay & Associates, Inc., P.O. Box 16253, Baltimore MD 21210 \$14.95 (hardcover)

An anthology of original horror material: 18 stories, poems by Ray Bradbury and Ardath Mayhar, and an interview with Richard Matheson. I enjoyed Bradbury's verse. My favorite forting arms Grow Wife.

fictions were Gene Wolfe's "Redbeard" and Robert Bloch's "Everybody Needs A Little Love," even though the Wolfe story wasn't particularly horrifying. Of course, the last time I was horrified by the printed word occurred some forty years ago when I was a teenager, so I may not be the best judge of the genre. Of the other material, Gahan Wilson is interesting and moderately original, Robert McCammon is good, F. Paul Wilson is original and presumably horrifying to most people, Joe Lansdale has a pretty fair vignette, Ray Russell is entertaining, Dennis Hamilton's story is okay, and Charles Beaumont has an intriguing "slice-of-life" that isn't really a story but is good reading. The Matheson interview is interesting and informative. The remaining stories seem strictly emotional and thus bored me; but overall the average quality is quite high, considering it's a genre that doesn't do much for me. Horror fanciers should love the book.

Star Healer by James White

Del Rey, \$2.75 (paperback)

This is the latest in the author's "Sector General" stories, about an interstellar hospiral catering to the varied life-forms of the Galaxy. Even though it's part of a series, the descriptions of the aliens and their medical problems kept me interested. This didn't seem to be one of the better books in the series, but it's quite good enough to be recommended.

The Color Out of Time by Michael Shea Daw, \$5.95 (paperback)

This one is blurbed as imitation Lovecraft and is a good example of the breed. The Evil builds very nicely: there is no misplaced attempt to overwhelm the readers from the beginning. The characters are interesting and, for a change in this genee, intelligent. As usual, it didn't horrify me; but it was quite entertaining anyway.

Eternity by Mack Reynolds, with Dean Ing Baen Books, \$2.95

Co-authored because Ing finished the rough draft that Reynolds left when he died. The plot of this is very familiar; it's quie similar to that of A. E. van Vogt's The House That Stood Still. In this book, the enclave of immortals is in a Mexican village, and their problems have more to do with the modern world. But there is still the threat, the traitor, and the protagonist who is somewhat more than he seems. It won't win any awards, but it's an enjoyable story and I found it well worth reading.

On A Bright Wind by Kathy Mar

Galaxy Spanning Adventure from the Hot New Name in Science Fiction!

L Windy

From the Renowned Author of the Sime/ Gen Series—a New Galactic Adventure Begins!

DUSHAU Jacqueline Lichtenberg

The end of this galactic civilization was coming.
Jindigar was certain of it.
Like other Dushau, his living memory spanned several thousand warra

several thousand years, and he viewed events from a perspective few short-lived mortals could fully appreciate or begin to understand.

He knew that when the newly crowned Emperor of the Allegiancy accused the Dushau of traitorously withholding surveys of distant planets, his real intentions were far more sinister than the execution of Jindigar and a few other Dushau. The Emperor's utilimate goal? Complete and utter genocide of all the Immortals.

As a human, Krinata was firecely loyel to the Allegiancy Empire, but in her ten years as a debriefing officer, she had never met a dishonest Dushau. She knew Jindigar was not holding back survey material, that he was no trator. She could not let the Emperor lidl him. But how could just one woman oppose the might of the Empire?

Jacqueline Lichtenberg's spectacular Sime/Gen series has won her a host of enthusiastic readers.

Price: \$2.95 (In Canada: \$3.75) 20-015-4 (In Canada: 20-016-2) Warner Books 1985 Printed in USA. Bischoff and White Team Up to Explore a Prohibited Planet and the Result is Dazzling!

FORBIDDEN WORLD

David F. Bischoff and Ted White Combine the best-

selling style of David Blaschoff and the far-out White and you'll get a science fiction novel that is truly unique. Forbidder World is tour de force science fiction adventure about uto-plan societies on a remote prohibited planet.

that is truly unique. Forhidden World is tour de frerce science fiction adventure about utopian societies on a remote, prohibited planet, massing a tyrannical relign of terror. When it, was first published. Trust Science Fiction in Review called Forbidden World Tascinstag and absorbing...can't be put down." It's the kind of suspenseful adventure the new geneation of science fiction readers devour. David Bischoff's novelization of the hit movie

War Games did well on bestseller lists last year. Co-author of the horror-occult novel, The Selkie, Bischoff is one of science fiction's hottest young stars.

Ted White has had his finger on the pulse of

science fiction for more than 30 years. As editor of *Heavy Metal*, he created much of today's most sophisticated science fiction Price: \$2.95

(In Canada: \$3.75) 20-017-0 (In Canada: 20-018-9) Now available wherever paperbacks are sold. Off Centaur Publications, P.O. Box 424. El Cerrito CA 94530 \$9.00 (cassette tape)

Mar is a professional singer, and the material here reflects the fact: it's closer to current pop music than it is to folksongs. Also, Mar is a better instrumentalist than most filkers, and knows precisely what her voice can and can't do. While I disliked some of the material, I think the average listener would prefer it to the general run of filksongs. And some of the songs - "Wild Geese," "Cup of Tea," "Call Him Lord," and others - are superb.

National Lampoon's Doon by Ellis Weiner

Pocket Books, \$2.95 (paperback) I've never been fond of National

Lampoon, so this was a pleasant surprise. It follows the basic plot of the original, the parody is internally consistent, and while some of the humor is overdone in the modern fashion, a lot of it is very funny. The theme is eating; "Doon" is the "dessert planet," covered with barren plains of sugar and famed for its unique export, beer, The native animal is the giant pretzel, and . . . well, you get the idea. Not quite hilarious, but good fun, and recommended

True Names by Vernor Vinge

Bluejay, \$6.95 (trade paperback)

Already a classic among computer fantasies, this one first appeared as half of a Dell "Binary" in 1981; now it has its own illustrated edition. The title comes from the fact that in an era of computer hacking and casual purloining of "restricted" information. one's "true name" is once again a secret to be guarded from potential enemies. It's a marvelous story of

modern magic worked with scientific tools

Valentina: Soul in Sapphire by Joseph H. Delaney and Marc Stiegler Baen Books, \$3.50 (paperback)

Valentina is a self-aware computer program, who becomes a partner with her creator to solve problems involving computers. This originally ran as a series of stories in Analog; the book version has been altered only slightly, to seem less episodic. I'm not particularly in tune with the world of computers, but this one was fascinating.

The Ring of Truth by David Lake

Daw, \$2.95 (paperback) This was published in June 1984 and may be hard to find now, but it's worth your while to look. The background is unique; a universe of rock, in which the livable worlds are "bubbles" of air (and plants, animals, light, etc.). Totally different natural laws prevail, and the plot concerns the protagonist's quest for the way things work and the discovery of the geographical boundaries of his world. Characters aren't that fascinating, but the background is.

Dragon Fall by Lee J. Hindle

Avon/Flare, \$2.50 (paperback)

This is the winner in the publisher's first contest for books about, by, and for teenagers. There seems to be no restriction on genre, but this one is fantasy, by an 18-year-old Canadian. The story concerns a teenager who designs stuffed toys and his problems when some of the more monstrous ones begin to come alive. It's a trifle short on logic, but I've read worse, and the idea is interesting.

Once in a while I'll be minding my own business, trying to remain inconspicuous at a science-fiction convention (as much as someone nearly 61/2 feet tall with dark brown hair, glasses, and a mustache can remain inconspicuous), or perhaps just chatting quietly with some folks who aren't part of the SF community; and the subject of book reviewing comes up. I try to downplay it, preparing mentally for a discussion of, say, what combination of alliterative letters makes for memorable characters in a novel comprised of previously-published short stories, or the relative importance of characteriza tion and plotting in rewrites of novelizations based on old episodes of "Space Patrol." Usually, though, that's not what people ask.

They ask: where do you get the books you review, do you read all of them, and how do you decide which books to review?

I answer: the publishers send me copies, advance or otherwise, or I go out and buy them; no, it's damn near physically impossible to read everything that comes out and still hope to earn a living; and uh, well, hmmm, that's a good one.

But as much as I'd like to come up with some lofty, high-sounding reason for why what shows up in the column makes it here, the answer is as simple as why you may choose to buy a book: because, on first glance, it looks as though it'll interest you.

Reviewers are as much susceptible to a publisher's ability to market a book as any other reader. Give me a welldrawn cover, some good blurbs from other writers praising the books, and a story synopsis that tickles my imagination — and odds are I'll read the book. Even if it comes in prepublication form, I'll flip past the plain cover and read the first few pages. Sound good? Into the hopper it goes.

And for those who say a reviewer should be immune to such crass advertising practices, come on down to the real world sometime. All I'm doing is what any of you do every time you decide whether on not to buy a book. You read a book because you think it'll interest you. Reviewers have to be in interest you. Reviewers have to be in and fair job. After all, if someone forces you to read a book that you doubt you'll like, odds are you'll be tougher to convince of its merits.

There are a couple of exceptions (aren't there always). If the book is by an established writer, or perhaps by a writer I've read and liked before, I'm more likely to review his or her work simply because an established writer has an established audience wanting to know the latest and I'm always eager to see what a familiar writer comes up with next.

Now, what was it you were asking about first-person versus third-person point of view in series books?

Dragons of Autumn Twilight by Margaret Weis and Tracy Hickman

TSR, Inc., \$2.95 (paper)
Dragons of Autumn Twilight is not
something I normally would have
picked up on myoun—it's word-&
sorcery, not generally my favorite type
of reading material. But through of
reading material. But through company that prints this magazine
(and strangely enough, the book, too). I read it. And I can say with a clear
conscience, all reviewers' ethics intact,
that I'm glad I did. It's an enterestaining

read.



WHAT HAPPENS WHEN A CONCERNED SCIENTIST DISCOVERS THE ULTIMATE WEAPON?

PEACE WAR

A Novel By

Vernor Vinge

"FASCINATING STE CONTENDER FOR NEXT YEAR'S AWARDS CONCEPTUAL BREAKTHROUGHP

"WILL APPEAL TO FAIR

"...SUPERB. IT REMINDED HE OF

-1000



JUNE 55965-6 • 400 pg. • \$3.50

Distributed by Simon & Schuster Mass Merchandise Sales Company

Mass Merchandise Sales Comp 1230 Avenue of the Americas New York, N.Y. 10020 THE GREATEST GAME OF ALL.

WHO WILL STAVE OFF THE LONG NIGHT WHEN DOMINIC FLANDRY NO LONGER CAN?

INTRODUCING... DIANA FIANDI

MAY 55959-1 288 pp. \$3.50

in the first new
Polesotechnic League/Terran
Empire novel in years!

She'll do her old man proud!

Distributed by Simon & Schuster Mass Merchandise Sales Compan



The novel is the first of what looks like will be a trilogy called DRAGONLANCE CHRONICLES: it's also the first of what you might call a new sub-genre in sword-&sorcery: novelizations of games. That's because the DRAGONLANCE™ concept itself is a series of modules for TSR's ADVANCED DUNGEONS & DRAGONS® rôle-playing game.

Based on what the authors attempt to do - essentially, get you away from it all in a fantasy world - the book works. The plot has all of the good roller-coaster elements of an adventure story, the background is well thought out, the characters have deep backgrounds, and the prose is acceptable. Indeed, it's more than acceptable on at least one front: many fantasy writers have a hard time shutting up when it comes to description. Weis and Hickman seem to know when enough local color is enough, and weave in bits and pieces as the tale goes on.

Of course, this being part of a series, a couple of loose ends are let hang. In addition, you might want to consider having either (a) a good memory. or (b) a scorecard handy, because of the large number of major characters (I counted at least eight). Don't look for any deep thought, either - but then again, that obviously wasn't the authors' intent. If you just look for a vacation from routine and just want to relax, Dragons of Autumn Twilight fits the bill. As pure entertainment, it's a good start to a new category of fantasv.

So Long, and Thanks for All the Fish

by Douglas Adams Harmony Books, \$12.95 (cloth)

Also in the "pure entertainment" category sits So Long, and Thanks for All the Fish, which, somewhat tongue-18

in-cheek, carries the cover line, "The Fourth Book in THE HITCH-HIKER'S TRILOGY." It's a mood that permeates the entire novel.

So you thought the Earth was destroyed by the Vogons for a hyperspace bypass? Ha ha, wrongo! Or so it would seem, as Arthur Dent returns to his dusty, but still standing, English cottage eight years (subjective time) since his adventures began. But he gets home to find an unusual present, left by the vacating inhabitants of the planet hinted at in the title. And then, there's the matter of this girl who seems to have the answer to what's making the world such a rotten place. . . .

Some of the jokes that were hilarious in the first three books are now only amusing, and one or two are threatening to grate. Some of the plot explanations don't completely satisfy. But Adams throws in enough irony, dry wit, and satire to keep the flow going. A few of the targets this time around: the environmental movement, first contact (specifically, I think, Childhood's End), dating, psychiatric care, computers, and even the book itself. In Chapter 25, for example, the lack of sex in the quartet is brought up by Adams himself and . . . suffice it to say that by taking nothing seriously, including story-telling, Adams breathes enough life into the series to make So Long, and Thanks for All the Fish worth your time.

Ram Song

by Sharon Webb Atheneum, \$13.95 (cloth)

Then there are those novels that take themselves too seriously, digging a deep hole of Significance, jumping in, and then watching helplessly - and perhaps uncomprehending - as the whole mess collapses and buries them. Such a book is Sharon Webb's Ram

Song, the final volume of THE EARTHSONG TRIAD.

The first two volumes have been reviewed in these pages by yours truly. Earthchild in the January '83 issue ("This is one of those books that starts out so incredibly well, then falls apart in the last few chapters."), and Earth Song in the September '84 issue ("It"s a good second novel that builds on the first, paving the way for what could be a fine trilogy."

Unfortunately, the promise shown in the second volume is not fulfilled by the third. It is now ten thousand years since immortal Kurt Kraus, leading the starship Ram, has left the Earth. Pre-adolescent children can still choose if they wish to get immortality and watch their creative energies wither, or stay mortal and burn brightly with creativity. Such mortal musicians from the Ram had colonized the planet Aulos, but many generations later, the Ram - and tales of immortality - are nothing but myth. The Ram, though, finds a time-space disruption causing problems for it around Aulos - and Kraus, out of desperation, is forced to work with three inhabitants to save both the Ram and our universe.

Heady stuff, huh? And to give Web her due, the society she's built on Aulos is quite convincing. There's also good character-building in the good guys she creates. But the villain is too similar to the one in the first volume, and is remarkably one-dimensional (I was reminded of Snidely Whiplash, I'm afraid). The time-space peril comes across as a contrived way to get Kraus and the Ram involved.

The world is worth more; a novel set on it along without Kraus and crew has the potential of being excellent reading. But as for the conclusion of THE EARTHSONG TRIAD, I'm forced to conclude that some trilogies

are better off as the novelettes that spawned them.

In the Drift

by Michael Swanwick
Ace Science Fiction, \$2.95 (paper)
There have been a few clunkers in
Terry Carr's new Ace Science Fiction
Specials, but page for page, they make
a lot better reading than most SF lines.
The latest example is Michael of
Swanwick's In the Drift, coming on
the heels of Howard Waldrov's prom-

Swanwick's In the Drift, coming on the heels of Howard Waldrop's promising, but disappointing, Them Bones (reviewed by Buck Coulson last issue). In the Drift is bread on two shorter.

In the Drift is based on two shorter works, "Mummer Kiss" and "Marrow Death," which appeared, respectively, in Universe II and Isaac Asimov's SF Magazine. The premise: Three Mile Island really did melt down, creating a radioactive area known as The Drift that roughly covers everything from Philadelphia north to mid-upstate New York, fIt also assumes popular mythology about radioactivity to be all true, glowing in the dark and all.1 The United States wants the area; so does the Greenstate Alliance which has taken control of areas north of The Drift. The novel loosely follows the rise to power of one Keith Piotrowicz, and his plan to try and resettle The Drift.

The book, generally, is worth reading. It's a little disturbing watching your main point-of-view character become a secondary one as the book progresses, but Swanwick has thrown in enough interesting folk to counter-act that. My suspension of disbelief was threatened by only one thing: pseudo-spiritual/psychic events involving a character and the reactor. But you can rationalize that away, In The Drift gets a, well, glowing review.

A Day for Damnation by David Gerrold



... what we've got in store for you!

A limited quantity of back issues of AMAZING® Science Fiction Stories is available through The Mail Order Hobby Shop. Just take a look at the order form on the right-hand page of this ad, then check the lines of those issues you'd like to order. If you want more than one copy of a specific issue, write the number of

copies on that issue's line. The price of an offering is listed after the name of the issue, payment in U.S. funds only. Be certain to add the appropriated shipping and handling charges, which can be found at the bottom of this page. Then, clip and mail the order form to. The Mail Order Hobby Shop. P.O. Box 756. Lake Geneva WII 55147.

SHIPPING & HANDLING CHARGES

Please include the following payment for shipping & handling

Flease include the following payment for shipping a nationing:					
	For U.S., APO,	For Canadian	For orders outside		
	& FPO orders:	orders:	U.S. and Canada:		
Total merchandise	Shipping &	Shipping &	Surface	Air mail	
cost is between	handling cost	handling cost	mail cost	cost	
\$.01 to \$20.00	\$3.00	\$ 6.50	\$ 7.25	\$26.50	
\$20.01 to \$30.00	\$4.00	\$ 9.50	\$ 9.90	\$38.75	
\$30.01 to \$40.00	\$4.50	\$11.50	\$12.25	\$47.25	
\$40.01 or more	\$5.50	\$13.25	\$13.75	\$58.50	

ISSUES AVAILABLE

IVIAI. 1905, \$1.50	IVIdy 1904, \$1.75
May 1983, \$1.50	July 1984, \$1.75
July 1983, \$1.50	Sépt. 1984, \$1.75
Sept. 1983, \$1.50	Nov. 1984, \$1.75
Nov. 1983, \$1.50	Jan. 1985, \$1.75
Jan. 1984, \$1.75	Mar. 1985, \$1.75
Mar. 1984, \$1.75	May 1985, \$1.75
se PRINT all information plainly.) Me dress*	
y ate/Prov untry te ase use street address, not a P.O. Box num	Zip
eck one to indicate yo Check enclosed Money order enclosed	☐ MasterCard
edit Card No C Bank No	
piration Date Inature	
Allow six to eight weeks for delivery. Maga	

AMAZING is a registered trademark owned by TSR, Inc., and the AMAZING logo is a trademark owned by TSR. Inc. 9 1985 TSR. Inc. All Rights Reserved.

Na Ad Cit Pocket Books, \$6.95 (trade paper), \$3.95 (paper) Pure Blood by Mike McQuay

Bantam Books, \$2.95 (paper) A couple of quick notes on books that won't get any literary awards, but may be up your alley. David Gerrold's A Day for Damnation is the second volume in THE WAR AGAINST THE CHTORR, in which an alien ecology, fronted by man-eating worms, has invaded Earth. There's more depth and character development in this volume than in the first, A Matter for Men, making it a better read. The alien ecology also gets a lot more interesting. It still reads like early Heinlein, but what the heck - if you're going to mimic someone, why

not the best?

Pure Blood by Mike McQuay is something of a departure for McOuay. better known for hard-hitting roughand-tumble SF. It's the first of at least two books detailing a sibling rivalry that stems in large part from the society: a distant future Earth in which there are a number of races, genetically tailored for specific tasks and roles. It's also a society that avoids interbreeding, valuing "pure blood" above all else. Until our hero comes along. Our Hero strikes me as a bit too goody-two-shoes, and the book ends halfway through the story, but it's pleasant enough. I'm not sure if I would go out of my way to pick up a copy, though. Wait till the sequel to be sure.



We're More Than Simply

A WHOLE NEW LOOK!

We're sparing no expense to bring you the best works from the finest science-fiction authors and artistel Our featured writers include Gene Wolfe, Poul Anderson, Robert Silverberg, Tanith Lee, and Ben Boya, Artists include Michael Whelan, Kelly Freas, and Steven Fabian.

AN EXCITING EDITOR!

George Scithers, a four-time Hugo Award winner and former editor of Isaac Asimov's Science Fiction Magazine, is editor of AMAZING® Science Fiction Stories.



	, , , , , , , , , , , , , , , , , , , ,	
Name		
Address		
City		
State/Prov.	Postal Code	
Country		
Subscription rates for 6 bi-month ☐ In the U.S., \$9 per year ☐ In Canada, \$11 per year in Canada		
Check one to indicate your choic	e of payment:	
☐ Personal check enclosed	☐ MasterCard	
☐ Money-order enclosed	□ VISA	
Credit Card No.		
Expiration Date	M/C Bank No.	
Signature	Date	
	P.O. Box 72089-AM, Chicago, IL 60609. AMAZING .,, and the AMAZING logo is a trademark owned by rd.	

Discussions

by the Readers

We inadvertently alarmed some of you recently; our apologies. We're not leaving Amazing® any time soon: we hone to be editing these venerable rages for some years to come. However, we are not a phenomenon like John W. Campbell; we can't keep it up for decade after decade. Eventually, we will turn over our supply of format and content sheets, our supply of 'however's and 'alas's and 'vour-typerribbon-is-dead:-bury-it-and-getanother's, and our small hoard of blank contracts for first North American serial rights to a worthy successor. And it's necessary both for the magazine's health as well as our own that this turnover he well before we get tired and complacent.

All of which is to explain - partly - why we keep saving that it's okay to send manuscripts to us directly, here at P.O. Box 8243, Philadelphia PA 19101-8243, only so long as you've checked a current issue of the magazine to see if that address is still good. We do not want the Philadelphia address to get into reference books and the like! The magazine's permanent address is P.O. Box 110, Lake Geneva WT 53147-0110

Dear George:

Just a note of thanks to you and Robert Silverberg for his two columns on nuclear energy. Where this subject in this country is concerned, such a voice of sanity is all too seldom heard. and therefore doubly welcome. Perhaps for lack of space, Bob did

not get around to stating that the disposal of nuclear wastes is another non-problem. More accurately, disposal is necessary and must be done right, but numerous ways already exist and the principal question is which one, or which several, to employ, while the principal difficulty is the sheer hysteria that has been whinned un-Nuclear wastes are hazardous, ves, but much less than the toxins which coalfired powerplants are already releasing (including radon gas) - if only because their volume is so much smaller. Moreover, it is simply not true that nuclear wastes will remain deadly for thousands of years. The time is actually about 600 years, after which their radioactivity will have dropped to less than that of the original uranium. We should have no difficulty about containers and storage sites reliable for such a period.

A long-time conservationist myself, I am utterly disgusted with the "environmentalists." In the nuclear matter, as in most others, doubtless the majority are merely ignorant; but then, as John Campbell used to say, they have no right to an opinion. Some of their leaders, however, have got to know better, and are therefore consciously lying. The motives of these people offer interesting material for speculation.

Regards, Poul Anderson Orinda CA

"Nukes" (the vaguer the definition

the better) have become the new demons of our age. Sure, thousands of people are killed every year by coal plants (not to mention coal mining. but then no respectable "environmentalist" would ever consider becoming a coal miner), and every once in a great while a dam bursts and people are drowned. Wood burning also has its hazards. These, however, are familiar and can be ignored by the apathetic. Nuclear energy remains incomprehensible to those people who are barely able to understand any aspect of the technological world they live in. Therefore "nukes" are the object of fear. Mass public fear has often been translated into political power.

George Scithers

Mr. Silverberg: I was recently given a copy of the May issue of Amazing® Stories, which contained your editorial about the movie Kovaanisquatsi, by a friend of mine. I am glad that I did not read your article at the time of publication as I had just seen the movie and had had a reaction similar to yours. I left the theater frustrated. Stating problems is easy but what about solutions? A small voice in the back of my mind, however, kept telling me that I was missing something but I could not seem to put my finger on what it was. I put it on a back burner and recommended what is, in reality, a powerful movie to my friends. If I had read your article then it would probably have cemented my initial concepts into a reality for me.

Some eight months having passed, I found myself reacting strongly and very negatively to your editorial. All the nagging doubts came to the surface, and I think I understand what was bothering me last May. The emphasis of the movie is not on the

obscenity of technology but what we have done with it. If you look at the meanings of the Hopi word KOYAANIS-QUATSI, "life out of balance," "life lived crazily," "a way of life that calls for another way of living," the focus is on the quality of life, the manner in which it is lived rather than the environment in which it is lived.

The director, Godfrey Reggio, used disparate extremes to make the point. First he presented us with the open desert with its immensity, the powerful sense of time and space, the serenity of patiently waiting for things to unfold naturally, of contentedness with things as they are. Then we are exposed to modern urbanity with its masses made up of nameless and faceless individuals, its hurry-up-I've-gotta-getsomething-done-gotta-get-morethings-gotta-have-a-good-timegotta-have-more-technology civilization.

The early Christian church, as do most faiths, had a powerful discipline called solitude. The purpose of solitude was to set aside time, away from the people and distractions of the world, to commune with your God, to learn the nature of your God, to become aware of your place in the scheme of things, to gain insight into yourself, those around you, and your relationship to them and with them. A distinguishing characteristic of Christianity, as opposed to other faiths that I am aware of, is that this time of solitude is not reserved for the priests, shamans, or gurus but is encouraged for every person because God's nature is one of a personal relationship and every individual is significant. However, this practice, even within the church, has become rare as we are all caught up in our culture. As a counselor/house parent for

delinquent teen-agers for four years,

one of the greatest difficulties I faced was helping them to learn a new life style that was less frustrating and had greater opportunities for success if only they could learn to slow down, learn to be comfortable with themselves and others, learn to be less demanding, to be more content with their lives as they were rather than comparing it with television and magazine advertisements, to take time out. As a graduate student here at Washington State University I am dismayed at the number of people who, for all appearances, are literally afraid to be by themselves, who must always be doing something, whose only goal in life is to get ahead. Ahead of what?

And this is the point of the movie Kovaanisquatsi: What is the point of all our activity? What is it that we are trying to get ahead of, or away from? Isn't it about time for "another way of living"? The movie is not so presumptuous as to try and give us The Answer as to what to do or what changes need to be made, because each individual must find their own answer and meaningful change can only come about as individuals change. I have found some answers that have been making changes in my life. I wish that others would find them too.

If you have time and would care to, I would enjoy reading your comments and observations. I realize that it is too late to have this letter printed and would be well satisfied with a letter. I have never before written to an editor or in response to an editorial and did my best to procrastinate this one out of existence (it has been a week since I read the article) but could not shake the urge to write. The issue is too great to let someone, whose writing I respect, miss it.

Sincerely, Larry D. Ruddell AMAZING

26

Graduate Center Box 86

Pullman WA 99163

Dear Mr. Scithers:

I read the comments by Rand B. Lee concerning the story "In the Sumerian Marshes" by Gerald Pearce (September 1984). Mr. Lee says he would rather read a "beautifully worded story on an old theme than a startling idea expressed in a wooden, twodimensional manner." So would I, but I'm sad that that has to be the choice. In choosing as you do, you move further away from what I call science fiction. Most of the fiction you publish now is fantasy. Some of it is very close to what I can find in the fairy-tale section of my public library.

"In the Sumerian Marshes" is not SF. A story with telepathy in it is not automatically SF. Mainstream fiction can - and does - deal with the unknown, the mysterious, and the currently-accepted-as-impossible. What is the story about? It is about a boy growing up in the Middle East before WW2. Well done, but not SF. It is mainstream fiction. I admit there are many definitions of SF. You must be using a very broad one.

Your cover says Amazing® Science Fiction in rather large letters; Fantastic Stories is in much smaller letters. Inside, the emphasis is reversed.

As for myself, I'm tired of witches, dragons, ogres, vampires, minotaurs, spirits, ghosts, haunted whatnots, outof-body and after-death experiences, talking animals, ESP, windows to dream worlds, and all the rest. I'd worship shamelessly at the altar of any mag that eschewed all of the above. As for mainstream fiction, I enjoy it greatly, but I don't buy Amazing® hoping to find it.

We think "In the Sumerian Marshes" is science fiction. Consider: a large portion of the population of the U.S. believes superstitiously in flying saucers. Does this mean that stories of visiting extraterrestrials are no longer science fiction? It is true that, to many people, the Pearce story would be "realistic." Many people have a superstitious belief in ESP too, not as a possibility to be investigated, but as fact. (These people tend to believe in astrology as a fact.) But we hope that science-fiction readers know better. Therefore, telepathy is still a "fantastic" subject, and since, in this story, it is held to be within the bounds of natural science, and not a supernatural phenomenon akin to ghosts or divinely-caused miracles, the story is science fiction. The only complaint we have about telepathy in science fiction is that the magazines ran it into the ground with hundreds of "psi" stories over a period of years: but, as Lee points out, there is still room for another good one. George Scithers

Dear Mr. Scithers:

Long have I, as well as thousands of other devotees to the field, hoped for the day when science fiction would be granted its well-deserved place in socalled "mainstream" fiction. Science fiction (science-space fantasy, actually) received a healthy shot in the arm (at least from the standpoint of generating a wide-spread interest in the sciencefiction/fantasy field) with the coming of the Star-Wars/Star-Trek/Close-Encounters movies. Hope springs eternal that the general public will sooner or later realize that Bradbury, Heinlein, Asimov, and many others

have written and do write literature when they practice in that often hard to define genre we call "sciencefiction/fantasy."

However, I wonder, I was first attracted to science fiction (and fantasy) some 35 years ago, just as I was losing interest in comic books and discovering that books and magazines held the key to real reading enjoyment. Those were the days of lurid covers and pulp paper; and I began reading Amazing® Stories, Weird Tales, Planet Stories, Astounding Science Fiction, and most all the rest with an absolute passion. Here was a field of literature which gave me everything; adventure, chills, mind-boggling concepts, flights to the end of the Universe and back (through multiple dimensions, to boot!), and - information that piqued my curiosity and made me want to seek more knowledge (e.g., what is an atom? how far away, how large, how inhabitable or uninhabitable are the planets in our solar system, etc.). In short, for me science fiction and fantasy both greatly entertained and informed - or made me curious enough to want to seek further knowledge on my own. This was something no other literature had done for me. And all the while I was avidly devouring "reams" of that wonderful "stf stuff," many others were looking down their noses at me for reading such "iuvenile" nonsense.

I daresay many still do look askance at me when I buy science fiction, despite the fact that many who do probably pay a not inconsiderable amount to see Star-Wars/Star-Trek/ Close-Encounters movies, Perhaps they equate all science fiction as being the "stuff" these movies are made of. How unfortunate! Oh, I'm not downgrading those movies: they are probably superb in their own right - good, light-hearted, spectacularly visual adventures with enough violence thrown in to make them what I suppose you'd call "modern." They are entertaining enough, but do not do much in the way of stimulating thought, presenting new (or new versions of) concepts, or leading one to seek out new knowledge (scientific or otherwise) — which is just what GOOD science fiction and fantasy should do (as well as entertain, of course).

I suppose what prompted this "letter of lament" was something I saw the other day. I went into a supermarket to look for the latest science-fiction magazine issues. I found them, all right, but guess where? Give up? Okay, I'll tell you: I found them in a section conspicuously labeled IUVENILE! The other side of that coin is possibly a very positive one. Hopefully, when youngsters lead their parents over to buy them a coloring book, they will select a copy of Amazing® Stories instead and get booked on our favorite literature at a very, very early age! Sincerely, Bobby G. Warner

You're right in your assumption that where a magazine is placed on the newsstand has a very important effect on sales. Fortunately, most newsstands don't have a "juvenile" section. We find that Amazing[®] tends to be placed among the other digest magazines,

regardless of subject matter, next to

5 Melrose Drive

Wedgefield SC 29168

the digest-sized comics, the vitamin guides, the mystery magazines, and — yes — the other science-fiction magazines. That one supermarket magazine rack you saw was, fortunately, a fluke. — George Scithers

Dear Mr. Price & Mr. Scithers, I really have to hand it to you guys

I really have to hand it to you guys for publishing the amount of poetry that you do. Not only are you being a friend to all the specularive poets out there who need a market for their works, but you are being courageous in taking a stand for poetry and exposing your readers to a little Kultur.

I especially like the Tom Disch pieces of a few issues ago. In the most recent issues, I loved "Tourist in Eacherland" and "To Melville." I do hope you like what I am submitting along with this letter. And please continue to publish such good poetry along with the fine fiction!

Sincerely.

Denise Dumais

Certainly poetry is a suitable medium for science-fiction themes. There are now many time poets working in this area. Some of them, such as the control of them, such as books of their verse published. Others appear in a recent anthology, Burning with a Vision, edited by poet Robert Frazier (Owiswick Press). As long as SF poetry maintains its current vigor and interest, we will continue publishing it.

George Scithers

As editors of this magazine, we will continue to read unsolicited, unagented literary material. However, we are not agents of, nor will we forward unpublished literary material to, nor will we even discuss unpublished literary material with Universal City Studios or with any production company associated with those studios or with the television series, Amazing "Stories.

Are you reducing your risk of heart attack?

Most coronary risk factors are preventable, curable or treatable Do you know the most common

risk factors? Test yourself. Find out how much you know about preventing

a heart attack This is not a pass or fail test. Its purpose is to tell you how much you know about reducing your

Which is a major risk factor

a High blood prossure b Cigarette smoking c. High levels of cholesterol and

d Dubetes All of the above

risk of a heart attack

Which additional factor may contribute to your risk of

" Obevey b Family history of heart Lack of regular exercise

d. All of the above. Which health risks are most controllable by the individual?

a Risks related to your behavior and hubits h Inhersted traits c. Problems in your environment.

such as air pollution, highway d. Conditions that require care

from hospitals, doctors and other health professionals

If you leel uncomfortable pressure shirtness of breath or pain in

2 mitutes or mire.

Wait an hour, it may be heart

burn or indigestion. Call an emergency revove

d Leave a message with your doctor's answering service

Which foods add to cholestens! oils and macramine h Low-fat milk and yogun.

c. Egg volks, butter and cheese al Fish and poultry

A stroke happens when oxygen-nch Warning signals of stroke include Temporary dimness or loss of

vision, particularly in one eye b Unexplained dizziness, un deadiness or sudden falls. Sudden, temporary weakness. or numbers on one side of

of Temporary loss of speech

Anyone starting a program of regular exercise for cardiovascular fittess should Go "all out" from the start

Constantly push to increase Pick activities which are rhythmic and repetitive. Start slowly, d. Always stand still or he down immediately after exercising

a Being nervous and high-strong h Feeling very teme

c. Having blood pressure than stays higher than normal d All of the above.

Untreated, high blood pressure

er Stroke h Heart attack r Kidney failure

al. All of the above

If you have high blood prevoire you will need to

at Take medications as presented A Get your blood preyvere

C Decresse amount of sodium

of Lone weight if overweight All of the above

> (the (2)d (3)a (4)z (5)z (6)e (7)r (8)r (91d (10)e 100 or 90 - Excellent Your arrowers show

80 or 70 - Good But, there's must be inthe health and safety courses analytic at saver for all chapter.

60 or before - You need help' Learn how peared Red Cops thapter Countless lives have been soved through

Red Corn maries And because of their stills, millions of American live safes, happer, healther lives







Darrod decided he hated the eternal shuffle, shuffle more than anything else in his drab life. The susurrus of silence, he fitted words to muffled shush shush of fiber-clad feet over the dusty rock corridors of his underground life.

Other sounds counterpointed the shuffle shuffle of many feet and the huse wheeze of many lungs; there was the fireful whine of the filter fans, the occasional clatter as the surface of a wall crazed and clinked down to the floor, the low voiced gurgle of the underground streams, and the rare forbidden sounds-which-must-not-be-discussed.

Darrod hated it all, hated everything about his life; but he hated that dispirited shuffle worst.

Unconsciously, the nictating membrane that protected his sensitive eyeballs from the dust that permeated the atmosphere closed tighter. On second thought, maybe he hated winnowing the worst.

Everybody knew that winnowing details were punishment, but he had done nothing, said nothing —

Dust-soured spittle clogged his mouth, and automatically he swallowed the nauseous mixture. Not much longer —

Winnowing. Tossing the ground lichen into the air, over and over, so that the nutritious grains fell back, and the dust staved in the air.

Coughing his lungs out, thanks to the dust. Winnowing dust, added to all the rest of the dust in the air. Winnowing with the rest of the misfits. The simple ones, and the evil. Like Malaci, sly, suspected of that most heinous of crimes, overeating, though he remained slender as a bit of untwisted fernifber; Dinka, who hadn't quickened despite the efforts of the most virile sires in the quadrant; Plage, who would be recycled before he reached Survivor, for the simple reason that he enjoyed other people's pain too much; Mordan, who was suspected (could it be proved, or even if the suspicion seemed well founded, he would be recycled immediately) of sneaking (how?) into the breeders' quatrest and trying to sire unscheduled, confusing the agendas if he had managed to quicken his illicit partner-in-crime.

And Darrod, who simply hadn't displayed the enthusiasm for his endless, boring duties that the Council of Survivors felt they had the right to expect.

"Well, I didn't ask to be born here," Darrod grumbled to himself as he jerked up his corner of the woven sheet, and the dust and ground lichen flew up into the air. Ask to be born . . . ask to be borne . . . bravely borne . . . briskly bravely borne . . . his mind wandered off, fitting rhythms again.

Until Plage took advantage of his preoccupation to slyly tilt the cloth so that at the next unified jerk he got a faceful of dust and chaff and, coughing helplessly, he managed not to totally disgrace himself by dropping the loaded cloth on the floor of the cave, zuining the whole shift's work.

And (of course) the shift chief reprimanded him for his carclessness; and though Darrod had a shrewd suspicion who'd tunneled him, he couldn't be sure, but it firmed his decision. He was going to run away. Deprive the council of his muscles, his virility, his developable skills. Running away would tell everyone, in plain terms, how he felt. Other people had run away, had crept to the topmost filters, and through them and up to the surface of the planet that had had to be renamed Scald.

To the surface of the planet — and instant death.

At the end of this shift. No, he reconsidered.

At the end of this breeding schedule. Not because he wanted the council to have his possible sirings, but because this particular schedule included Bretha, Curian and Farral, three breeders who were justly famous among the sires for their talents.

Then he would climb to the highest level and —

The wombship came first.

Darrod rejoiced. Now he could really make his statement to the council.

He planned it out in an instant on hearing the news and played it over and over again on his mind's stage, while waiting for the time. The line of men, anonymous in their drab robes, even their faces

shadowed, their figures blurred in the dim light of the phosphorescent lichen. The demons, the devil-worshippers, the wombshippers, those aliens who were not human but who brought those vitally necessary items—like parts for the fans and filters—and so had to be treated as human, slowly walking down the line, choosing one unfortunate victim after another.

Scald had nothing to spare to trade with the wombshippers, in exchange for what they brought. Nothing but people. Males, since a sire could cover more than one breeder, but a breeder could only have one child at a time. And the wombshippers took, every victim one less mouth for Scald to feed.

So during the Choosing, Darrod would step forward and say —

Did the wombshippers really eat their own dead? No matter. The ultimate statement, the ultimate insult, was for a human to step out and say he preferred going with the skydemons to staying with his own kind.

Darrod's lip curled under the anonymous swathing hood.

They'd be talking about it forever.

Talking . . . yammering . . . yammering the years away . . . eating time . . . timorously tilling time . . .

The click-click of the talking stones in the pattern that meant 'all assemble' spread through the maze of corridors, and soon the endless shuffle shuffle of dispirited feet was converging on the large central cavern.

Darrod wondered what the scene looked like to the wombshippers. (Did they even have eyes: He had heard that they had organs that looked like eyes — some of them — but they didn't appear to pierce the phosphorescent dimness too well.) Lines of dun-grey cyphers, even in this unscheduled interruption, their feet instinctively falling into their unified rhythm. Shuffle, shuffle. He ground his teeth together. Well, for Darrod, it wouldn't be shuffle, shuffle any longer!

The lines were already forming as he entered the grotesquely carved cavern; sires to his left, breeders to his right. His heart beating exultantly, he took his place at the end of the sires' line. He knew what to expect, though he had still been in the pursery at the last visit.

When the two lines were complete, the wombshippers, the skydemons,

when the two lines were complete, the womosmppers, the skydemons, would come. And choose. And those they chose would go aboard the wombships, and never be seen again.

"I wonder if they are them had got they do couldn't halp thinking."

"I wonder if they eat them before they die," he couldn't help thinking. The unders in the nursery had loved to speculate, whispering surrepti-

tiously during the sleep periods. I wonder. . . .

Down at the far end of the line — which couldn't be straight because it had to wind around the natural stalagmites that littered the floor — a small group of people (or were they all people?) was progressing. He turned his head inside his hood, but could make out no details. Except —he gasped. One of the group was naked.

No. He blinked and tried to see through cloth, and dust, and dimness. No, not naked. Just not wearing the protective, antidust swathings of the

caverners.

He was so engrossed in the parade, he didn't see the single demon approaching from the other direction — unfil the demon actually stopped in front of him, tapped him on the shoulder, and said the single, accented word: "You."

Darrod was so startled, he actually spoke aloud without permission.

"Me? You're choosing me?"

Bitter irony. That he would go involuntarily, be chosen out of line, before he could speak his piece, dragged away — so everyone would think — with the rest.

"No." The demon — he was a demon, his face scarred and covered with strange growths like a feathery kind of lichen — spoke. "No, you are a reject, mudsider. Get out of the line."

It took several heartbeats to penetrate. Again, such was his agitation, that he spoke without permission. "No! You can't do this! I'm going!"

But the skydemon reached out, the hands covered with the lichenlike growths clamped around his wrists; and somehow he was forced to his knees, both hands twisted painfully behind him. "You're a reject, mudsider. Your leaders were told to keep your aura away from the choosing ground. Now come along with me."

And he was being half-dragged, half-carried away, the alien's strength literally unhuman, his own struggles a nurseryling with an adult, his legs flailing futilely, tears of frustration blurring his vision. Slight as the alien appeared, Darrod had the odd impression that he could as easily have picked the caverner up and slung him the some twenty meters to where the council of survivors stood in an impassive, anonymous clot between the two lines of vulnerables.

Instead he was dragged, until the alien slung his struggling burden at the feet of the nearest councilor and spoke, biting out his oddly accented words. "You people were told you had a reject among you and to keep its aura well away from the choosings. Why then was it here, its aura confusing to the choosers?"

"Our apologies, revered skyeater." The husky voice could have come from any one of the unmoving figures, "but we have not the mind powers of you skylords, and could not identify the one you call a reject from your warning alone. If this be the one, we will see he is removed immediately."

"Perhaps," said another, lighter voice, "if you would be so good as to explain exactly why this one is unsuitable, so we may know and remove any similar offenders before they cause problems in the future."

"Its aura is twisted," said the demon.

Darrod scrambled to his feet — and relaxed. There was nothing he could do. He had wanted to run away; now he would have his wish, though not precisely as he'd envisioned it. Already, behind the council, drawn by the commotion, came a couple of husky recyclers, their robes striped with the unmistakable white.

Perhaps the skydemon was psychic, or perhaps he read the body language of the undergrounder who stood there taut yet resigned.

"Your language, I speak it not well," the demon said suddenly. "I must to say, its sure is so... so tightly rooted to your world, that it blanks out the auras of others who might be successfully transplanted. There is nothing wong with it, quite the contrary, as long as it remains where its aura is so closely attuned. If we tried to take it, it would die; and its death and distress would diminish us. Even the thought of being torn away upsets it, and so upsets us. "

Darrod opened his mouth to deny the whole parcel of lies, and the habit of sultitume — speak NOT until addressed when in the presence of survivors — kept his lips sealed for a couple of seconds. Then his rebellion surged and he opened his mouth — and saw a recycler, hands twisting and untwisting the knotted cord of mercy wrapped around his waist like a belt.

"There is nothing wrong with the sire, only that its distress at the thought of being taken away lies so deep," one of the survivors was saying. "But many — if not all — of our people are distressed. Why is this one different?"

"I cannot tell you." The demon shook his head. "I am not a chooser, merely one who executes their bidding. And I have been told to remove this one, before its aura distorts the choosing. Perhaps its distress is simply stronger; perhaps it is younger, close to the limit; perhaps some recent change in its life has sensitized it - I cannot know. I know only that I have been ordered to take away the stressing aura."

Darrod suddenly knew where death and life lay. For a second, he was tempted - the monotony, the dust, the drabness. But there were the breeding schedules, other small pleasures . . . he made the May-I-speak gesture, and the councilor nearest him growled, "Acknowledged."

"I have recently been transferred from one duty to another," he informed.

"Did you prefer the former duty?" asked the alien; but Darrod waited until one of the councilors gestured before saving vehemently, "Oh yes!"

"I suggest," the alien's voice was bored suddenly, "that it be returned to its former duty as soon as is convenient. For now, it must be gotten out of range. Come, mudsider, walk with me; and I will inform you when you are far enough away from these proceedings."

"It is not necessary, skylord, that you concern yourself," one of the councilors murmured

"It is necessary I be certain it is out of range." One of the recyclers stepped forward, at a gesture from the councilor.

"This one can take care of the matter," the councilor said. "You need not exert yourself further." "You argue," the demon frowned, a horrendously alien expression that

caused several of the councilors to try to conceal flinches behind their heavy hoods, "and the choosings go awry. I said, I will ensure that its aura is out of range. It is capable, surely, of leading me the shortest and fastest route away from here. Are you not, mudsider?" Darrod looked toward the council.

One of the councilors shrugged and said, "Very well, sire. Lead the . . . skylord out, until the lord says your . . . aura is far enough away. Then, when the choosings are over, report to the recycling center." Darrod bowed his head in acknowledgement. The demon had merely won him a short reprieve.

The skydemon couldn't have known what 'Report to the recycling center' meant, but his odd eyes, surrounded by their frilly growth of skin stretched over thin spines, narrowed.

"Come," he put out a hand, covered with the same odd frills as his face, on Darrod's thin arm. Then, to the council, "Be sure this one is included in the next choosing, honorables."

"But you said - it should not be in this choosing - "

He shrugged as he was walking away, Darrod beside him, "Reject often chosen, next time around. Don't know why, not a chooser myself, Just see

36

that this one available, next choosing." And they were through the narrow archway and marching down the corridor, the demon striding ahead as though his eyes were radars, piercing the gloom.

"Sorry about that," the demon said suddenly. "If I'd realized -- "

"No talk here," Darrod muttered frantically, wondering if it were a greater sin to speak or to keep silent and let the other break the covenant. "Wait."

It was some time later that they reached an intersection and Darrod was able to step into a cross corridor and sigh and say, "It is permitted to speak here. Thank you."

The alien leaned against an outcrop whose curves flowed together like a male survivor's waving beard and shrugged. "I should have thought. But your aura was so rolled, you were distressing the chooser. I just wanted to get you away. It wasn't until the councilor signaled the executioner that I realized —"

"Executioner?"

"Whatever you call him. The man with the garrote cord around his waist, the man who would have wrapped it around your neck if I hadn't intervened."

"Ah," Darrod nodded. "The recycler. Recycling's necessary, you know, otherwise —"

The demon's mouth twisted cynically. "Don't tell me, I've heard it all

before. I'm called Cock-eyes, by the by. Do you have a name?"
"Darrod." Then, insatiable curiosity, "What do you mean, do I have a
name? Don't all people, even skydemons, have a name? How can you

know one another apart if you don't have names? How — "

The demon laughed. "Some worlds don't believe in identity, or names. Often they use similar clothing, especially covering nobes like your people, to carry the matter further. My home world needed, under the heat of our sun, heavy robes; but we let our individuality show in cut, in color, in decoration. We were never unaware of exactly who we were with. But you all seem garbed alike; perhaps there are a few differences I couldn't see. But that's why I asked."

"I thought skydemons knew everything."
"Everything the way it was," he said with an odd undernote of bitter-

ness. "We go and return, and several hundred years may have passed. Some worlds change only a little, but others — " A shrug. "Everything we 'knew' is wrong."

"You really do live forever then?" It was wistful. "If you had taken me, would I have lived long enough to see other worlds —"

"We don't live forever." The demon looked away. "It only appears that way to you mudsiders. And you can never come with us. The chooser was most emphatic."

Darrod picked up the first comment. "You don't live forever, just the

several hundred years between one visit and the next, eh." A frown. "But

your ship comes far more often than that."

"Different ships," the demon shrugged again. "As for the time between visits, I can't explain that to you, it's what's called a paradox. But at the speeds we travel at, time compresses; what seems several hundred years to you is only a few months to us. I can't tell you the why; I don't understand it myself; I only know that it is so. In terms of our hearts' beating - "Darrod cocked his head. "Oh, yes, I have a heart." He took Darrod's gloved hand and placed it against his thin jumper. "There, you feel it? In terms of those heartbeats, I have lived, will live, no longer than you and probably less. I cannot say why time seems to alter at high speeds, I only know it does."

Oddly enough, Darrod believed him. Time going at different rates made as much sense as immortal skylords, passing and repassing, taking their toll of the young and healthy, "Why wouldn't they take me?" he

asked

Cock-eyes rolled his mismatched eyes upward. "Who knows. Usually, when we have a volunteer, we take them gratefully. Most of the mudsiders chosen are torn away from their homes," a sudden cutting edge to his voice, "unwilling. But the chooser said you'd be there and you'd want to be chosen . . . and to take you completely away during the choosings." Another shrug. "The chooser is the law, Darrod. I'm sorry." "But will they take me next time?"

"No. That was a lie. Otherwise they would have killed you, wouldn't they?"

"Yes." Darrod wasn't ashamed. Culls had been recycled all his life. He didn't think it was wrong, any more than someone on another world would think it wrong to breed neokine for meat as well as milk.

"Will they kill you next time if you're not taken? I'll say something to them if you think there's any danger."

"I definitely won't be taken?"

"If things change. But this chooser usually knows. You'll never be taken, Darrod. I'm sorr-"

But Darrod had gone away again, as he sometimes did. Gone into that retreat inside his mind, the only place he had privacy, control. Cock-eyes stared at him, then his eyes narrowed, and he nodded to himself and waited patiently, until Darrod blinked slightly and said, "No, I'm probably safe enough. You said might, not would. They'll be willing to wait, one or even two more visits. They're separated by years and years here, you know. That's enough, I'll never be allowed to make survivor, you understand. Once I'm past breeding -" He accepted, and so Cock-eyes did, too.

"Are they very cruel, your leaders?" he asked gently. Darrod was puzzled. "Cruel? No, that isn't allowed. Cruel ones are recycled before they make survivorhood."

"Always?" Cock-eyes strolled to a jagged outthrust of rock, at just the convenient height for a seat, which was why it hadn't been chipped away but smoothed down instead, and seated himself, head atilt, legs drawn into a casual curl, body leaning easily back. But there was nothing easy or casual in the eyes that a brighter light would have revealed as mismatched in both color and musculature, so that they often crossed badly. But he could see with them, which was all the wombshippers cared about.

"Of course," Darrod was slightly puzzled. "We always know, we live too close together not to know everything about each other." Then he paused, thinking. How did they know? How did he know about Plage, for example, except that whenever he was with the other he felt a shrinking within himself, as though cruel metal fingers were scoring down his back.

Cock-eyes's mouth twisted. "You mean, the only ones who live to be survivor are the ones who don't want the job, because they can be trusted

not to abuse their privileges."

"How else could it be?" Darrod had automatically moved slightly down the corridor and taken out his fiberwhisk and begun scraping the dust together, so he could put it in his farmbag to be later mixed with the nightsoil and dumped onto the lichen beds. "Why, someone who enjoyed power over others might abuse that power."

"It has been known to happen." Cock-eyes' voice was very dry.

"Not here." Darrod was sure.

"No, it would appear -- "Cock-eyes seemed to be thinking, then, "Do

you always have to be doing something, Darrod?" Darrod didn't stop his sweeping. "How else can we survive?" he asked logically. Then, "Dust must always be picked up. Otherwise it gets into the air. Why when we winnow - that's the duty I was transferred to - the dust from the winnowing is enough to choke you. That's why winnowing is always done inside a double lock, with filters and fans inside each lock. But some of the dust escapes nonetheless, so we pick it up whenever we can. There's too much dust in the air all the time, despite what we do and the filters,"

Cock-eyes coughed, and hawked, and spat, not noticing Darrod's astonishment at the gesture. If a caverner had to spit, it went into a special waterproofed bag, saving even those few drops of moisture for the lichen beds.

"So dust is your problem, is it?" Cock-eyes seemed thoughtful. "I hadn't known that. Seems odd, dust in an underground, sealed cavern."

Darrod couldn't answer that. He couldn't explain that it was the sealing that aggravated the problem, since the dust had no place to escape unless it fell into the rare, deep underground streams. Nor could he explain about the temperature gradients, nearer the surface, caused by the startling temperature changes from searing day to night, which penetrated much deeper than one would expect and crumbled the rock over a period of time. He did know about the bits of ground lichen and about how the fibers they used literally disintegrated over time, so that a hand rubbing across them would be coated with a chalky residue.

Dust dervishing demoniacally . . . disintegrating deviously. . . .

Darrod's mind went off into its own universe of word rhythm, while his body continued its task mechanically. Most of the time his private thoughts didn't matter, since not-work-related speaking was discouraged among the caverners. So Darrod didn't think it at all odd that the skydemon would stop and be silent while he, Darrod, visited his private paradise of sounds and patterns.

Until Darrod, not even realizing he had been away for a time, said, "It's because we are sealed, I believe. The dust has no place to go, unless it falls

into one of the rivers."

"Ummmm." Behind Cock-eyes' mismatched eyes, wheels were obviously turning. He stayed with Darrod, asking his quiet questions, until he suddenly turned, his eyes seeking the council chamber behind them, and said, "The choosings are over, Darrod. I suppose you'd better go to wherever you should be, if the choosings hadn't come and interrupted your . . . duties."

"Yes, skyeater." Darrod nodded. "And - I thank you for your interest

in an unimportant sire like myself."

Cock-eyes shrugged, almost embarrassed. "You're a good man, Darrod. I'm only sorry you can't go, since you wanted to so badly. But it's not all moonlight and dreams, you know, aboard the wombships. It's a hard life, hard and lived close to the mark — "His voice trailed off. Because what was life in the underground catacombs of Scald but a hard life, lived close to the mark? "At least here, you're among your own people, close to family and friends — "And he strode off down the corridor, boldly, giving the lie to the rumor that the skyeaters were blind in the caverns' dimness, before Darrod could tell him that he had no family, any more than any product of the impersonal nurseries, or remind him that his friends, if he made any, would constantly be separated from him by the ever changing schedules and agendas.

But perhaps Cock-eyes, hurrying back to his own duties with the choosers, heard the little sigh that was almost more mental than physical, because he came to see Darrod again. Cock-eyes waited patiently until Darrod's shift was over and the caverner was theoretically free, though usually so exhausted he only wanted to find an empty bunk and sleep for the next shift.

This time Cock-eyes was there, gesturing silently to his mouth — someone must have explained the caverners' customs — and Darrod led him to a corridor where speaking was permitted.

"We're leaving soon," Cock-eyes aid as soon as Darrod told him it was

permissible to speak. "I just wanted to - " His eyes flicked downwards.

"To say Faretheewell, and wish you luck, and . . . "

"That was kind of you." Darrod smiled. "But I'm more than content nonround that it is not in the single spends with the winnowing crew, then I'm being transferred to spinning and weaving." Despite a lifetime's training in impassivity, there was an undertone of joyous eagerness, for one sensitive to pick up.

"Like that better than, ah, winnowing, eh?" Cock-eyes was amused.

"Oh, immensely, All duties are equally necessary — " Parroting

"Oh, immensely. All duties are equally necessary — "Parroting lessons pounded in so deep, so young, that now they were totally instinctive.

"—but weaving . . . I've never been privileged to do weaving before.

All those patterns forming...."

"Patterns?" A gentle nudge for the shy caverner.

"Oh, yes. To watch a pattern emerge, to see the form of it from the beginning. There are patterns in everything about us, you know. The walls, every stretch is different, and you can see — "He gestured toward the nearest wall, a complexity of natural erosion overlaid with man-made alterations. "Patterns on so many levels . . . look, you can see pictures, faces in the curves and valleys, that's the first level. But beneath, other patterns, how the rock forms and then was eaten away and then was chipped away, here and here, chisel marks. See, how faint they are; it was a long while ago, because the marks of the chisel are blurred and it takes a long time for the dust blown about the corridors to wear away stone . . . and here, feel," he moved the alien hand across the face of the rock, "you can trace the very patterns of the currents of air. You can even tell how little they've changed over the years, though you would think, with new corridors being opened, that they would change. But I suppose the important thing is the nearby corridors, and this is an old sector. But can't you feel the pattern of the air currents wearing away at the stone - "

Cock-eyes let him go on a bit, then he smiled. "I'll have to take your word, though I'm sure I could feel it all if I were more familiar with your world," he spoke apologetically when Darrod had run down a bit. "But

it's all so strange and new to me, it's hard to pick out the, well, subtleties."

Darrod's mouth opened and closed. "Strange and new," he said final-

ly. "But — isn't your world much like mine? I thought —"

"I thought so. Other worlds are different from yours, but I thought with your rock corridors and the wombship's metal ones... I thought... but I don't think so now. The similarities are — are superficial."

But Darrod was only half-listening; he was running his hands down the walls, his mind again fleeing down many-patterned vistas.

"Darrod," Cock-eyes said finally, and Darrod's mind returned reluctantly.

Languishings of light . . . lightfingered hands . . . currents carving

caracoles. . . .

"Darrod!" Apologetically, "I haven't much time left. Would you accept a gift from me, Darrod?"

"A gift?" The concept of gift had been lost in the exigencies of life on

Scald. "Yes, a gift. Something of mine," he explained, "that I would like you

to have. Because I feel badly that you lost what you wanted, and because I had a part in your losing. . . ." He stopped; Darrod still looked confused.

"What do you mean, something of yours?" Private ownership was something else vanished in life underground.

Cock-eyes blinked. "Something whose disposing of I have," he said almost gently, "and which I would like you to have." "But," Darrod was staring at Cock-eyes' thin jumper, "I don't need

anything."

Cock-eyes swallowed. "But the - thing - needs you to have it."

"How can a robe or a moisturebag or a whiskbroom need?" Darrod asked with his world's logic.

Cock-eves swallowed again, "Is - is that all the things you can think of, Darrod?"

"Of course not. We use lots of different tools. They make patterns, too. Spindles for mossfiber, shuttles and heddles and looms, the filterfans and all their different parts - "

"Enough. I suppose I'd better not. Those councilors, they wouldn't allow - " He eyed Darrod slyly. "Of course, if they didn't know - "

Darrod was shocked. His mind leapt to the only 'thing' that the councilors shouldn't know about that Cock-eyes could supply him with. "If your people have a little extra food, Cock-eyes, you mustn't give it exclusively to me, I mean, we'll take it right down to the storerooms and put it in with -"

"You think I'm talking about food?"

"What else is there? Clothes, tools, food - "

Cock-eyes sighed. "Just the opposite. You may need extra food to - " he frowned, watching Darrod whisk whisk whisk. "This place isn't private."

"That's all right. I can make the sign of privacy, and nobody'll listen. But if it is food - "

"No, it isn't. You sure, though? I don't want to get you into trouble."

"You won't. But if it is something wrong, I won't -

"Not wrong, I think, But I'm afraid," He looked around, Anonymous shufflers were passing them in both directions as he spoke, but their heads were bent, the attitudes uncaring. Had that strange gesture of Darrod's really given them privacy? He shrugged, mentally. It was Darrod's world, after all. And he had consulted the best seers on the ship before deciding on this gesture. "Your council seems to condemn for no reason at all."

Darrod opened his mouth to defend his world, but Cock-eyes was going on, "But I don't care. But if you can't keep Twink let me know before I embark." He reached into a pouch about his waist, and when his hand came out there was a furry band wrapped around his wrist.

"What an odd object." Instinctively, Darrod's hand reached out to feel. "How very soft, ho —" The band emitted a deep hum. "OH!"

Cock-eyes's free hand stroked the band, which was about twice the width of a finger, long enough to wrap around his wrist with plenty to spare, and colored in variegated abstracts of blue, grey, silver, and dun. "They're called kittycurls; I don't know why. We have a lot of them aboard the ships. They're useful, they don't eat much, they eliminate pests, and they make pleasant companions. Would you like to hold her?"

He had gone too fast for Darrod, who retreated a couple of steps. But Cock-eyes continued his stroking motions, and the hum increased to a contented purr that soothed instincts along nerves Darrod hadn't even known he'd had. Until Darrod was standing beside Cock-eyes, stroking, feeling the incredible softness of fur under his fingers, hearing the hypnotic hum. Until Twinkletoes had been transferred from one wrist to another, slithering happily under the cuff he untied to accommodate her. And until Cock-eyes, filling Darrod with a confusion of instructions for Twinkletoes's continued good health, had left, waving.

So while the other caverners shuffled along, hands in sleeves to prevent inadvertent knocking against something, Darrod was stroking Twinkle-

toes, his shuffles louder to cover her happy hum.

Darrod would have claimed that he had no spare time whatsoever, but he had to make spare time, and solitude, because Twinkletoes, like any other young animal, needed exercise, needed to be let out and played with. (He didn't know what playing was, at first; but he learned fast.)

He was a little shocked at how sharp the needle teeth in the mouth he usually couldn't see were, but he quickly learned what she would and

would not tolerate, and the raw scratches faded.

What a fascinating thing Twinky was, when let out in a deserted side corridor or an empty store area. She slithered in and around, sometimes so fast his gaze couldn't follow her, until suddenly she appeared, making a syncopated hum that was almost like laughing. She earned her keep, too, though he was generous with sharing his quota with her — and never let her loose in a store room with food in it. Even if his stomach complained now and then, it was worth it, for the sheer newness, the joy of watching her carefree gambols and joyous pirouettings. She gave him material for a thousand new patterns, then a thousand more. But she earned her keep in more than fascinating him: She caught a succession of tiny scavengers that lived in the caves; and though he would never have thought it right to take extra for her, he felt is the more than earned what he gave her from his

own meager ration.

(He never considered that the scavengers she killed would more than

pay for the food she ate herself.)

In fact, in a surprisingly short time, he was able to rearrange his life to accommodate Twinkletoes and to reassure Cock-eyes, on a last hurried visit before the wombship left, that he would be able to care for her very well indeed

He had forgotten - and Cock-eves had never met - Plage.

Plage, who enjoyed other people's pain too much,

"So this is where you keep the thing," Plage's thin tones echoed slightly in the small, dim seldom-used chamber. Darrod whirled so abruptly that he almost lost his balance, and would

have fallen on Twinky, except she screeeped a warning and dived out of the way.

"What a lot of noises the thing makes," Plage said distastefully.

"It's not hurting anyone," Darrod gasped, instinct telling him he was in big BIG trouble.

"It isn't?" Plage drawled, sauntering inside the narrow entrance to aim a slow kick that Twinkletoes disdainfully dodged. "It eats, doesn't it? And breathes. If I told the council, it'd be recycled next second, and you the second after that "

"She's not hurting you," Darrod asserted fiercely, more shocked by the threat to Twinky than himself.

"It breathes and eats," Plage repeated, then, slowly, "It's alive, isn't it?

Living flesh?" "Yes," Darrod tried to catch his pet, but with her usual perversity, she

thought it was a game and slithered away from his clutching hands. "Living flesh - like lichens or mushrooms?"

"Ye- NO!" Darrod literally howled, seeing the danger clear.

"It's alive, it's not human - it's edible," Plage drawled. "And I'm -hungry."

"NO!" He scurried after Twinky, but she loved this game, and wove in and out of the stalagmites with the skill that days in the underground caverns couldn't have given her if the narrow metal cylinders of her

wombship world hadn't been equally crowded.

Plage simply waited, until one twist gave him a clear shot. He swooped, and Twinkletoes - with a lack of discrimination that would give Darrod cold shivers - later - curled around Plage's wrist and purred. "Alive," Plage repeated. "Edible. And . . . I'm hungry." He was looking at Darrod though his eyes seemed fixed on the living, purring bracelet wrapped around his wrist

Darrod wasn't stupid. "She's not very big," he said, panting in his haste and distress. "Not big at all. I'll let you have some of my quota instead. Every day. It wouldn't be as much as as - as - all at once ... but over a lot of watches. . . . "

Plage stroked the curving, curling, purring animal thoughtfully, which told Darrod he'd been spied on — thoroughly. Plage knew the exact way to flip the fur to make Twinky eight her loudest, most satisfied drone.

"I'm hungry now," said Plage casually.

"I haven't collected my quota yet — you can have all of today's," Darrod said hurriedly.

"And tomorrow's? I'll be hungry again next watch?"

"No." The hand stroking Twinkletoes tightened, and she gave a screep of distress. "Wait," Darrod pointed out, "I can't do my work properly if you have all my rations two watches running. I have to have some — most if I'm to miss all for this watch. But — "He licked his lips. He had a small treat scheduled. "I'm to have a beefyroom next watch. You can have that." Plage pursed his lips. "You can have all my beefyrooms from now on!"

"Ummmm," Plage considered it. Then, "All right — your next quota, and all your beefyrooms from now on — and at least a lickstick from the

quotas you don't have a beefyroom."
"All right." Darrod was shaking with relief.

"And I won't eat your thing." He handed Twinky over to Darrod. Then, mouth twisted, "Though how it can be worth—all those noises—" He glided out the exit, and Darrod collapsed onto a 'mite, trembling with relief. He didn't yet realize the cardinal truth about blackmailers: they seldom stoo with one demand.

Flige was the stuff that true criminals are made of. He didn't reel his hooked victim immediately. He seemed content with the extra food, and though Darrod grew gaunter than ever — he was still subtracting Twinky's food from his own, and after satisfying Plage's demands too it didn't leave much at all — he was happy, because Twinky was safe.

Until Plage made his next demand.

Such a small favor, really. An extra-shift chore, they all got them once in a while. His voice was a purr that rivaled Twinky's as he reminded Darrod of all he owed him, and then his eyes dropped to the wrist where Twinky rode. . . . Darrod shuddered, but took the extra shift.

And was not unprepared for the next demand, which was one of Plage's

regular shifts with the winnowing crew.

After that, it became a regular business. One shift in ten.
One in eight.

One in six.

If Darrod had been gaunt before, he became positively skeletal. The cut in rations, the extra work took their toil. In his turn, Plage grew sleek. No caverner could ever be fat, but his face filled out and grew rounded under the concealing hood, his limbs full instead of slim. Plage was clever. He knew how to keep his victim just this side of total

lage was elever. The knew now to keep his victim just this side of

collapse. Darrod raced round and round in his cruel squirrel cage, but it all came back to the same thing; he couldn't risk Twinkletoes.

Until Plage made the mistake of confusing bitter despair with giving up completely.

He was so sly about it that it took several seconds to sink in. He started by commiserating, voice oozing crocodile sympathy; how overworked Darrod appeared; how he ought to take it easier. At first, Darrod thought Plage was simply twisting the hook a little. Plage liked to do that. Darrod wasn't fool enough to believe that even handing Twinky over for ingestion - now - would end it. All Plage had to do was report him. But if Plage had laid a hand on Twinky, Darrod would have gone for his throat, and both men knew it; he could only be recycled once, after all. But this was another demand.

It was only possible because they were now on different agendas. He and Plage were scheduled to visit the breeding quarters at different watches. All Darrod had to do was exchange coifs with Plage, and Plage could walk into the quarters as Darrod, fulfill Darrod's duty, and walk out, no one the wiser. In the perpetual dimness of the caves, would a breeder who might or might not have met either man know the difference?

So simple.

Too simple, but Darrod never realized that - that Plage must have

done it before, that there must have been other victims, that this wouldn't be the first time that Plage had fouled up the council's schedules. Darrod wasn't thinking of schedules, or the council's justifiable wrath

if they ever found out - Darrod wasn't thinking at all.

Neither was Plage. He was too busy defending himself from Darrod's murderous, if amateur, attack.

They rolled over and over, dust misting up from their clothes, both oblivious to smaller pains as they smashed over tiny rocks, bounced against larger stalagmites. Darrod had his hands clamped around Plage's throat, and he was tightening them, eyes blind, mouth a snarl, a killing animal.

Twink had given one terrified squeep as he leapt and scurried for the one comparative safe spot in her suddenly storm-tossed universe. She slithered up his arm to his neck and curled around where the breadth of

human shoulders protected her - mostly.

The fight didn't last long. While the two were calmly talking, in a legitimate-talking corridor, everybody else simply shuffled past, ears closed to give the two privacy. But when the fight started, everyone who could see - and several who couldn't, drawn by the clickstones hastily tapping EMERGENCY - piled onto the two. Within seconds after Darrod's attack, hands were pulling them apart - though it took the strength of half a dozen caverners to separate Darrod from his gasping

The full council wouldn't bother to assemble for so inconsequential a sin as a fight. But there were always several councilors spending watches in the chambers, to be available for a smaller matter. Three would be enough. Two out of three was a majority for a small decision.

There were, as it happened, four councilors present in the chambers, one spinning, one pumping a wind-up portable filter-fan, one neatly darning a hole in a coif, one deftly binding a shock of fiber to make a

broom.

The darner spotted the group shuffling in first. "A decision." It was more statement than question.

Several in the forefront of the group signaled assent.

The darner checked around, nodded. "Four of us. Ankhor, you and I participated in the last decision, while Fluit and Melchor did not. Three out of five?"

Ankhor was pumping the hand pump, slow but methodical. "Two out of three should suffice. I prefer to take a hand off this as short a time as possible."

Hands . . . hands travail . . . hands at helm . . . whip hand . . . hands at shift . . . graveyard shift. . . .

They hadn't had to force Darrod; once he'd been torn off Plage he knew what had to come. He had walked proudly, eyes forward, ignoring the sluff-sluff that said Plage was being dragged.

"Two out of three," the darner agreed. "Ready - now!" She and Ankhor both thrust out a hand, fingers bent in the traditional positions.

"Scissors cuts paper," Ankhor announced what they all saw, though there had been neither scissors nor paper in their underground corridors for centuries. "My point."

In seconds, paper had wrapped stone, and scissors had cut paper again, and Ankhor was settling back to his task with a satisfied grunt, while Yillian the darner and her two colleagues, Fluit and Melchor, shuffled with the slowness of age over to the judging dais.

When all three were in position on three of the points of the multisided star, Yillian spoke, "Who comes before this council in judgment?"

Darrod knew his cue. "I do, honored survivors, I, worker Darrod." "And what offense has disturbed the even thread of our lives, worker Darrod?"

"He attacked me," Plage snarled. "For no reason!"

"Indeed, worker, I was not aware I addressed you. Perhaps the other

worker got his tongue twisted, and you are worker Darrod?" Plage gulped, and frantically made the permission-to-speak sign.

"Worker - " It was Fluit, on Yillian's right, "identify yourself, immediately." He gave the permission-to-speak sign as he finished the command

"I am worker Plage. And I state, before you survivors and my fellow workers, that worker Darrod attacked me, with intent to cause damage, for no reason." His voice was husky, he had to force it through his swollen throat

"Indeed," Yillian, in the center, spoke, her old voice as smooth as fresh squeezed mushmilk over a parched tongue. "It sounds as if he succeeded, or do you normally speak in such distorted tones?" She added the proper gesture, and Plage eagerly spat, "No, I do not! He caused this damage. And if the other workers hadn't removed him, he would have caused much more."

"I wish I had," Darrod muttered to himself, not realizing that his body language was unusually articulate, and that Yillian and Melchor exchanged knowing glances through the haze of their swathing hoods.

"Worker Darrod." It was Fluit's calm old voice speaking, "is this what occurred, from your world-view?" A hand gestured for his reply.

Darrod gulped. If he revealed the blackmail and Plage's threats, he would have to tell about Twinkletoes; but if he kept silent, there was a good chance he could slide Twinky off into some shadow on the way to the recycling chamber. It was Plage's life - against Twinkletoes. If they believed him. If he wasn't just sacrificing Twinky for nothing.

He gulped again, and straightened his shoulders, "He goaded me, He - insulted my work. We shared duty, not many shifts ago, and he said - he said the work went better without me now." (It was the caverner's ultimate insult.)

Eyebrows raised behind shielding clothes. "Worker Plage, why did you damage another worker's self-esteem in such a manner? Worry over his lack could have caused his work to truly deteriorate." Yillian gestured for a reply.

Plage licked his lips. "There is some small truth in what he says, but I assert. I meant it only as a jest. Our work area is crowded, and with one

less body, it does go a trifle smoother. That is all."

"I see," Yillian nodded. "A jest, perhaps the words a trifle ill-chosen, and taken sorely awry. Not a justification, surely. But perhaps - worker Plage, remove your coif and let us inspect the damage this worker has caused you."

Plage, with a smirk, because he knew the bruises would be forming, removed his coif and stood, head and throat naked to the inspection of the councilors. Even in the dimness, the dark mottling on his bleached pale skin was strikingly obvious, blotches of ink on virgin parchment.

"Ummmm," Yillian glided off the dais and approached, as if to inspect the bruises more closely. "The damage would not appear to impede your work, worker Plage."

He made the gesture to speak, and she assented. "It hurts," he managed a creditable groan. "It hurts badly. I-will try my best, but I am not sure I can produce to standard, with pain distracting me."

"Ummmm," she said again, and stroked his throat. He flinched back exaggeratedly, deliberately groaning loudly. "Ummmm," she said again.

"Did anyone present actually see this attack?"

A breeder stepped forward, and spoke after receiving permission, "I was walking toward these two workers. They were speaking in a permissible speaking area, and I averted my ears so as to not intrude. Then suddenly, this one - " She pointed to Darrod, "jumped on that one, his hands about his throat. I and others leaped to the assistance of the worker threatened. We pulled his assailant off and came here. This is all I know."

"You are sure," Yillian asked, "this one struck first."

Assent.

"Anyone else?" Two others testified that Darrod had, indeed, struck first with no sign of aggression from Plage.

"Ummm," Yillian nodded slowly. "It would appear, worker Darrod, that you overreacted."

Involuntarily, Darrod's hand went up to where Twinky was twined, a living muffler, around his throat.

"Permission to defend yourself," Yillian spoke softly.

"He shares the blame. He should not have diminished my work in my eves."

Plage frantically requested permission, and when it came, spoke. "It was a jest only. I swear I did not mean him to take it seriously."

Yillian gathered the other two with her gaze. "Judgment?"

Melchor spoke for the first time, "Not yet, Weigh that one," He pointed to Plage.

Plage took a step backwards. "No!" he howled.

"Yes," Melchor smiled thinly. "One who lies in what he puts in his mouth will lie in what he speaks out of it. Weigh him. Now." His glance moved to Darrod, "There are many reasons for the speaking of untruths. Strip that one also. He conceals something."

"No-OOOOO - " In a second, the room was chaos. The group of workers had moved toward Plage, who had instinctively whirled and tried to hurl himself toward the nearest exit; but there were a good dozen or so standing behind him, and he had simply flung himself against a human barricade. There were sounds of thumps of foot hitting flesh, moans, curses - Plage's mostly, the others were still all too aware of the sanctity of the chamber - and various sounds of battle royal.

Having most of the workers pile onto the writhing heaving mass with Plage at its heart gave Darrod his chance. He didn't stop to think, the threat to Twink was enough. The crowd was dangerous, once it got its hands on him. He wasn't thinking, he simply saw the mob between him and one exit and only three spindly oldsters blocking the only other way out. He ran, hands shoving - as respectfully as possible - at the three

who were in his way.

Fluit fell, the other two simply staggered, and as soon as they recovered, were helping her to her feet, anxiously asking if she were all right. But she was watching the last swirl of dun robes through the door with an odd. introspective look on her grave old face.

"Shall we send out the hue and cry?" Yillian, too, sounded thoughtful.

"Not yet," Fluit shook her head. "I have heard . . . much . . . concerning this Plage. He will tell us what we want to know — what we need to know before a decision can be reached — for the promise of a reprieve."

Melchor frowned. "Promise of a reprieve? And if he turns out to be overweight, as I suspected? He would appear to be a germ of the worst order."

"Undoubtedly he is," the thin old voice was very dry. "And he may enjoy his reprieve from the recycling chamber — locked onto the upper levels." The other two nodded. There was neither food nor water on the upper levels, and the only exit — if the way down was blocked — was up onto the searing surface.

Plage talked, eagerly. He tried to justify what he'd done, made excuses for not turning in Darrod immediately. A wombship thing, after all, and might have proved useful. The oldsters nodded, and questioned, and cogitated — and agreed. Plage was dispatched, kicking and screaming, to the upper levels.

Which left the problem of the escaped Darrod.

The full council convened to discuss the problem of Darrod and his alien protegé. Most worlds hated the wombshippers, those free travelers through space's vastness; but this world had less energy for hate. It also had no margin for anything which chipped away at their thin hold on survival

But there was a chance that the thing — pet, tool, toy, whatever-it-was — could be made useful. It had evidently affected Darrod, since, according to Plage, he had been doing more than his work on less than his rations for quite some time; and if they could discover whatever it was that the thing accomplished

So it wasn't the hue and cry which went up clicking through the corridors, after all, it was the code of 'worker lost.' . . .

And when the search came up with nothing — as they knew it would — it was the extra 'worker lost' lamps that glowed at the ends of the lowest known corridors. And in the deepest, end-of-the-known-world exit, Darrod's quota — not a full worker quota, but the reduced share assigned rarely for somebody temporarily not working — was laid out under a lamp each cycle.

It was worry for Twinky more than his own need that forced him to try for it. Fluit was waiting, patiently. She stepped out of the bend that concealed her when she heard the shuffle stop about where the food had been

"Don't be afraid, I'm alone," she called, reading his horror and shock in the taut, arrested pose of the gaunt body. "I wish to speak with you. You may reply without permission until I say our talk is ended. Since there are no guards hovering, you may satisfy your hunger without fear."

He swallowed so loudly it echoed hollowly through the chamber.

"And take care of the other, also, if it needs sustenance," she spoke

placidly, her even tones designed to be soothing.

"You — know —"

"Some," she said agreeably. "I am hoping you will supply what we yet lack."

"Plage - " He was still poised for flight.

"He told us much. Regrettably, I do not feel, considering the source, that I can rely too much on what he said. Which is why I would like to speak to you." With an easy motion she dropped onto a smooth topped stalagmite of convenient height and eyed him with her head cocked slightly to one side with the cool impartiality of one long accustomed to death-and-life decisions, who could make such decisions if necessary — while deploring the necessity. "The council," she said, and adjusted the long skirts of her robe slightly, "is willing to suspend judgment on both you, and your ... friend, at least for a time. A long time, if you satisfy me now and in future."

He reached down, scooped a handful of dried food, and inserted it into his robes. A warm purr ensued. She noted he had fed his pet before

himself and stored that datum away.

"And Plage," the deep-sunken eyes beneath the hood were wide and direct, "do you think he'll let me get away with defying him? Or did he weigh over, and you recycled him after all?"

She was inspecting her gloved hand. "In the confusion following your escape, his weighing was forgotten. And later — it was politic to promise him freedom from recycling, at least temporarily, in order to encourage him to enlighten us about you — and whatever it was that induced you to lie to us."

His spine stiffened. "I regret the necessity. But I would do it again, given the same cause."

"You would, would you?" Her voice was thoughtful. "But you have no cause to lie to me now, do you?"

"No, because I'm not going to go back and give Plage his chance for revenge. Why I'd be lucky if all he did was kill and eat Twinky in front of me."

"It is alive, then. May I see it?"

"I - " He shrugged. "All right, then." He opened the front of his

robes, and brought Twinkletoes out. Fed, she was ready to be stroked, and within seconds she was emitting her hypnotic drone.

"It does make strange noises, does it not? Yet not unpleasant. And it's

alive? Will it grow any more, do you think?"

"Cock-eyes, the wombshipper who gave her to me, says not. He says

this is as big as they get."

"Then it can't eat that much, can it? Plage claimed you'd been stealing food for it, but that doesn't fit your persona. You're a good boy; we checked you out when the wombshippers came and meddled. You've never been suspected of the least peccadillo, and stealing food — "She didn't have to tell him." — is a heinous crime."

"I've never stolen a thing —" he gritted out. "Plage lied!"
"We know that," she soothed.

"Besides," he wanted to justify Twink as well as himself. "When we're

on the upper level, Twinky mostly feeds herself. She catches eaters, you know."
"No —" She sounded as if she'd been hit in the solar plexus. "No. I

"No —" She sounded as if she'd been hit in the solar plexus. "No, I didn't know."

"There aren't many, down here. But on the upper levels, she caught a lot. She could have lived off them completely, if I dared to let her loose more than once in a while. She used to bring them to me, so proud, before she ate them."

"Ummmm." Wheels were turning.

"Twinky doesn't eat that much, really! And—and—if you let her, she catches lots of caters. Lots and lots." Desperation mixed with hope. "Catches eaters," she said slowly, "why, that sounds useful."

"She could be." Very young and eager.

"And if I said that your sin could be atoned for in only one way, but that I would personally care for your friend as you yourself would, would you be willing to come back?"

"Yes," not even stopping to think.

"Ummmm. Come sit beside me, son; I have to think, and conversing with our voices raised pains my throat."

Old habits can be ground in deep. He flinched, and grabbing a handful of food, came and squatted easily beside her stalagmite throne. Almost automatically, he shared the food between himself and Twinky, giving her a bite and then himself. She noted that, too, and suppressed a smile.

"It was wrong of you not to tell us about . . . Twinky," she said at last.

Miserable. "Yes, ma'am."
"Have you an excuse?"

He sighed. "No, survivor. Except - "

"Yes," she prodded.

"I didn't want Twinky hurt. And — and as long as I wasn't taking any extra food, and she wasn't damaging anything . . . as long as I did my work .

... what difference did it make to anybody? Except to me. If Twinky had been — had been recycled, it would have made a great difference to me." "I see." A slight hesitation. "May I touch.—Twinky?"

"Oh - " He raised the arm Twinky was riding on. "Surely, survivor."

"It hasn't claws or teeth, then. Eaters can hurt you, I know."
"She has claws and teeth, survivor, but she won't hurt her friends. She

likes people. Most people, anyway. Cock-eyes says she is only one of many kinds of animals that live amiably with people aboard the wombships."

"I see." She stroked, and the contented hum deepened and crescendoed.

"Say —" He was all boy again, pleased with a boy's simple joy. "Say, you really have the touch. She never liked Plage to touch her, not after the first time. Always ran away to me when he tried. But she likes you."

"It does." Her amusement was carefully not allowed to show. "Will

you come back with me, then?"

"I haven't much choice, have I?" he leaned his head back against her knees. "There's nothing to live on down here, except for a few stray eaters for Twinky. Not enough, though. She'll just starve slower than I will. If going back means life for at least one of us . . . you just put this food out to lure me here, didn't you? Now that you know what you wanted, you won't do it any more."

"No, I'm afraid that there's a limit to how long we can spare food with no return."

"You promise, honor of a survivor, to take care of Twinky as I would mysel?"

"I promise, when it becomes necessary, to have your Twinky taken care of as you would yourself. Honor of a survivor."

She put her hand on him, leaning on his strength as they slowly made their way back to civilization as they knew it. He would be furious, she knew, when he realized just how deep her treachery— in his eyes—went. Because to the young, the recycling chamber was at least quick and clean. But living, as he would be forced to, with a load of sin and guilt and penitences he had earned (concealment, disrespect, and a host of other crimes) was going to try his eager young heart to the uttermost. A sore period it would be for him, though he would emerge when the time of testing was over — she was sure, and survivors couldn't afford mistakes—a better, more tempered person, the stuff the best of survivors were made of.

She had, after all, only said "If."

Waste was the caverners' ultimate sin. And culling Darrod, with this wholly unexpected talent of his for seeing beyond the narrow corridors and rigid limits that ruled their lives, would be the ultimate waste.

and rigid limits that ruled their lives, would be the ultimate waste.

The survivors had had to be fanatically suspicious of any change that entered their desperately-lived-on-the-edge lives, because change was far

more likely to be for the worse than the better; but by the same token — a fact that Darrod had instinctively recognized, though even now, she was sure, did not know that he knew — they could not afford to let slip even the slightest chance for bettering their harsh existence.

The vote wasn't in on Twinky yet, but she was sure — survivor's instinct — which way it would go. She was not displeased. There had been something very pleasurable about the soothing drone and the small body curling trustingly toward her hand. Twinky would definitely be an addition to cavern life

One thought caused a frown to gather.

One inought caused a rown to gamer.

She suspected the wombshippers — those necessary, how necessary evils — never did anything without a purpose. But Twinky, whose usefulness was only partially glimpsed at present, was an incomplete gift. There was only the one of her.

Until Twinky, of a race bred to reproduce prolifically, under the most stringent conditions, even parthenogenetically, if necessary, had her first

litter.

And until the pattern — she had had many long talks with Darrod by

then, about everything but her plans for his personal destiny — was complete.

Shuffle, shuffle. Clickety, clickety, click. Shuf — clickety — fle, shuf — clickety, click — fle.

Come on human, there's a fascinating smell just down this corridor!

Darrod — and the other caverners — soon had a thousand intriguing new patterns to set rhythms to.
...maneuvering around mites...leaping lightly laughing...playful

pals, cheerful chums. . . . No more shuffle, shuffle. Not with Twinky and her brood about. Now

it was trot, trot, clickety, click.

q

Jayge Carr has appeared in most of the major magazines, and in many anthologies, including some of the various Year's Best volumes. Her novel Navigator's Sindrome (No, that's not a typo. It's a "bad pun," she says.) was released in March 1983 from Doubleday. She lives with one husband, two danghters, and a cat sometimes called Imperious Leader in a house older than all of them put together, which needs so much repair that it is the only hobby any of them will have for quite some time to come.

MAGAZINE SECTION by R. A. Lafferty art: George Barr



R. A. Lafferty is known as the architect of unusual stories and of no less unusual novels. Corroboree Press is publishing his COSCUIN CHRONICLES: The Flame Is Green, Half a Sky, Sardinian Summer, and First and Last Island.

STRANGE INCIDENT AT HAT-BOX FIELD

Years ago (oh, from 1958 to 1962) Junior Giant Jet-Hoppers were used on short commercial flights out of small airports in the NE Oklahoma, NW Arkansas, SE Kansas, and SW Missouri areas. These smallest of jets would carry only thiny-two passengers: Well, on the routes they ran there were seldom more than twenty passengers: if there'd been smaller jets made, they'd have been used.

The Junior Giants had size limitations in several places. They had the narrowest throats of any jets, entirely too narrow; and because of this the Junior Giants were often choked down by the birds they sucked in, especially ducks and geese.

At dusk of November 2, 1960, a Junior Giant took off a north-oriented runway from Har-Box Field of Muskogee, Oklahoma, bound for Fayetteville, Arkanasa, a flight of ninery-four miles. This was a little early in the year for geese to be flying south, and yet they had been heard the night before this.

It was for this reason that Flight Attendant Angela Rebhuhn brought her shotgun along with her on that flight. Just after takeoff, seeing a Plying V of geese coming right at them, sho opened the nose-escape window (quite against regulations) and shot a blast at the V of geese to make it veer off. Then she readied herself for the second blast, but she did not shoot it. She said later that she had the clear impression that the leading goose of that V was not a goose.

The Junior Giant sucked up the first five flyers of the V, then choked and died, banked over the Cookson Hills, and came back to Hat-Box Field at an easy glide and made an easy landing.

The night service crew (it consisted of a man and a boy) removed four geese (and one thing that was not a goose) from the gullet of the Junior Giant Jet-Hopper. The danage was declared to be minor, and the Jet-Hopper took off again after a total delay of noty seven minutes.

The four greet that had been sucked into the narrow gullet of the jet and choked it down were now no more than four hot little blocks of charcoal (damn, they stayed hot for a long time!), and the man and boy spread them out on the floor of the machine shed

But the leader of the V, the thing that was not a goose, did not seem to be badly burned. It was a curious creature. Its wings were like bat wings, very long fingers with a leather-like webbing between them. The creature was slightly made, but in had a finger-wing span of at least five feet. Its head and face were not at all goose-like. They were a little like those of a coon, or a monkey, or a comically ugly little man. Then the funny face stretched itself, flexed its web-oined fingers, opened its eyes,

and it said "Hot and fast, there's just no thrill like it."

and it winked at the man and the boy

and the man and the boy fell all over themselves getting out of that maintenance shed.

Then they heard the popping of stretched leathery finger-wings as the thing that was not a goose took to the air and vanished.

Nobody except Angela Rebhuhn ever believed the man and the boy. The man got testy and would not answer questions about it unless you found him boozed up down on Callshan Street in Muskogee. The boy started out hitch-thiking the morning after the incident. He said that he was going back home (to Olathe, Kansas) to finish high school. He said that he had seen something that only a liar could believe.

But their unbelieved story survived.

Every two or three years after that, people (even newcomers to the neighborhood who could not have heard the story) would report seeing a V of geese going south in the evening sky with a lead flyer that wasn't a goose.

I found the boy in an art class in Olathe, Kansas. He drew for me a clear picture of what he had seen. I found Angela Rebhuhn and showed her the picture.

"That's him, that's him exactly," she said. "I've seen him twice since then. But how one's lead geese into the jet throat when I'm on a flight. He and I have come to an understanding, an understanding over about three hundred air yards. When I shoot my warning shougun blast, he veers off with the V. He understands that my second show will be more than a warning."

By John T. Woolybear in the Sunday Magazine Section of the Muskogee Messenger — of quite a few years ago.

John T. Woolybear was a casual man with pale blue eyes. He was flecked with large tan freckles, and each freckle had a slight blue ring around it as though it had been drawn by a cartoonist. He had three wives: one in Illinois, one in Nebraska, one in lexas. He was on tolerably good terms with all three of them. Well, he sent each of them a card on her birthday every year. But he never entered the three states where they lived because (tolerably good terms or not) they had legal writs out against him.

John Woolybear was a newspaper hobo. He could run a Linotype machine and all those other machines around a newspaper. He was a fair reporter. He wrote unusual feature articles for the Sunday Magazine Sections of newspapers. He had sold at least one of them a week for about forty years and that was about two thousand of them. He had his own rules for writing these Magazine Section stories: "THEY MUST BE STRANGE, THEY MUST BE OUT-RAGEOUS, THEY MUST BE GARISH, and they must be true." And he insisted on that lower-case truth in every one of them.

He seldom stayed with one newspaper for more than a month.

When he left a town he usually left about an hour before dawn, dragging a suitcase big enough for three men, picking a highway nexus on the edge of town to hitch a ride from.

2.

STRANGE HAPPENINGS AT BLACKBERRY PATCH, KANSAS

Parallel to the Cross-Timbers there is a ridge known (but not known at all widely) as Big Wind Ridge, which runs from the Texas gulf-shore through Okla-

homa, Kansas, Nebraska, the Dakotas, and into Canada. It is the unofficial place where the Great Plains end and the hilly woodlands begin, and one goes down from the plains to the hills. There is always a strong wind out of the west all along the ridge, and as a result of this there is much kite-flying by men and boys also all along the ridge. Big Wind Kidge is the best kite-flying place in the world, and the best kite-flying place along the whole Kidge is Blackberry Parch, Kansas, an unincorporated place in Doniphan County.

Blackberry Parch, Kansas, is the only place in the world where boy-carrying kires and man-tarying kires are really common. The west wind at Blackberry Parch will sustain really large kires, some of which are equipped with seats or even dangling gondolas such as passenger balloons have. It is not uncommon for three to five persons to be airbonned by a single kire; it isn't uncommon if they are Blackberry Parch. But there is something unusual and even secret about the people of Blackberry Parch.

The Blackberry Parch from which the settlement got its name was originally a hundred miles across, back in the Indian days, and the berry vines were thick. But now (for the last hundred years or so) the patch has been nibbled away by settless and farmers. But the heart of the patch still remains thick and secret: and it is there that Blackberry Parch people (they are now an etnhein mixture of Kaw Indians and settler-Germans) live and make blackberry jelly at the Jelly Factory to sell all over the United States, and make kites and Fat Air suits. Since there is no graveyard or burying place around Blackberry Parch itself, one has to believe that the people go to what they humorously call the Elephant Graveyard in the Sky, in kites and their Fat Air suits, when their days are finished.

Sure, the Kaw Indians flew kites back in the Indian days, beaver-skin kites strung on frames of rough and springy Osage Orange wood. For kite-ropes they used twisted huckbeerry vines. They flew the kites mote than a mile high, and sometimes the kite-ridets put on their Fat Air suits and jumped out of the high kites. Then they might drift as far as fifty miles, across the wide Missouri Kiver and into the treacherous Missouri Territory. And their descendants, the Kaw-Germans, still do it.

Affected by the technology of the settlet-German element, the Far Air suits are much better than they were in the Indian days. And so are the kites. Tough, rubber-like polyethylene has taken the place of beaver-skins for both the suits sud the kites. The suits used to be blown up by mouth, and the air was stoppered inside the auits by big wooden conts. Now the suits have regular air-valves in them: and every suit-traveler carries a bicycle pump along with him when he goes drifting. A person encased in a Far Air suit can walk along pretry well on the ground, or bounce along; and if he falls down, he can roll along and bounce up again. And in the air he can get along famously. Far Suitons from Blackberry Parch, Kansas, have floated across the Missouri River and clear across the state of Missouri and come down in Illinois. They carry dried blackberries with them to nibble on. And they wear advertisements on their Far Air suits, and they always attract attention when they land. Offen they are given rides back to Ransas by drivers for the Missouri hydrol.

58

Kansas Motor Freight Line, as MK Freight Lines is one of the advertisements they most often wear on the backs of their suits.

There is another aspect of the Blackberry Patch kites and the Fat Air suitons that some people find hard to believe. It is the main secret thing about them. There being no burial grounds around Blackberry Patch itself, the Blackberry Patches, when they find that their days have about run out on them, go by kite and suit to the secret place with the secret name: but the jobling name for it is the Elephant Graveyard in the Sky. A person gets into his Fat Air suit and goes up about a mile high in a kite. He jumps out then, and he begins to glide. But he does not begin his gentle glide downward as usual. He glides upward across the Missouri River. He comes to the secret place that look like a big cloud on the outside. But it is a special sort of folud with its spherical silver lining on the inside. It is bigger on the inside than on the outside, and has running water and green pastures. And there he will be gathered to the boson of his fathers (mothers too, maybe), and will find all the wonderful Blackberry Patch becole who have ever bassed over to their glory.

This last part may be inexact, as nobody has ever entered the miscalled Elephant Gravevard in the Sky and returned to give an accurate report of it.

And just where is this big secret cloud with the joking name?

It is exactly over downtown Kansas City, Missouri, and exactly two miles up.

By John T. Woolybear in the Sunday Magazine Section of the Kansas City Star.

+ + +

That was the last thing that Woolybear ever had published in the Sunday Magazine Section of the Kansas City Star. The Monday morning after it appeared, Peter J. Oldpeter was fired as editor of the Magazine Section and was replaced by a younger and less genial person.

And the Magazine Sections themselves in many Sunday newspapers were now being replaced by other things such as a second or even third section on TV personalities or Rock-Sockers.

3.

THE STRANGE CASE OF THE GOOD GIANT IN STONE COUNTY, MISSOURI

The only things known for sure about Saint Christopher are that he was a very good person and that he was a giant. Other things about him, such as whether he ever really lived at all, are not known for sure.

Dating from the third century A.D., all around the eastern shores of the Mediterranean, there are at least a hundred giant statues in various states of decay. In many cases the local belief is that they are statues of Saint Christopher. Some of the statues are fallen and broken badly, Some of them have lost heads and arms. But there is one thing missing from even the best-preserved of them, and that is the face. There are no faces on any of them, even those where the rest of the head is preserved. On the best-preserved of them, even those where is clear evidence that the faces were broken off with hammers or axes. So at least as many of the statues are called locally "The Giant without a Face" as are called "The Good Giant Sain Christopher." But what could have been so very wrong, or so very right, with the faces of the stone giants that people believed they had to break them off?

In Stone County, Missouri, in the United States of America, near the place called Talking Rocks, there lived until two years ago a man named Hotace Goodjohn Chitstopher, a retiring sort of man who seemed to be liked and admired by every-body and everything except the coons and badgets and wolverines. These animals hated him, but dogs loved him, and people liked him.

Horace G. Christopher, a giant of a man, was generous. And he always seemed to have money to be generous with. Nobody knew where he got his money, for he never worked for pay and he said that he didn't know where it came from either." just reach into one of my pockets and I find whatever I need," he said. The good giant had giant pants, and the giant pockets in them were so deep that they never ran empty.

The Good Giant never worked for pay, but he worked almost all the hours of almost all the days without pay, doing all sorts of things for people, especially for widows and orphans. He was a talented workman in every art and craft you could think of.

Besides his great height, there were two things a little bit unusual about this Giant John. He was seventeen hundred and fifty years old. And he was dog-faced. That's right, dog-faced. In hair and hide and snour and eyes and east and smell he was dog-faced. And it seemed a little bit weird to hear a man's voice (a clear, strong, fiftendly voice) coming out of his dog-faced.

The Friendly Giant had a mill and he ground grain for everybody who brought it. Like all millers, he took one-tenth of the grain in fee for the grinding. And yet the nine-tenths of the grain that he returned ground and saked to the customer was always of greater quantity and greater weight than had been the ten-tenths that the customer had originally brought to him. And he gave to the poor the one-tenth amount of every grinding that he had kept from the customer.

The Giant had a hotel or roadside inn at the place called Talking Rocks in Stone County, Missouri. He was the patton of travelets, so he welcomed travelets of every sort at his hotel and offered the best bed-and-board anywhere. When travelets left him, they paid whatever they could afford. And they always found twice the amount of their payment back in their pockets after they were a mile or so down the road.

Everybody liked him except those animals, the coons, badgers, and wolverines, those animals that traditionally hate and fear dogs. Then there appeared a wolverine of genius in the neighborhood. In every species, whether wolverine or human or other, about one individual in five million will be an individual of genius. The gifted wolverine got about a hundred other wolverines to assemble. He had to be a genius because the slashing solitary wolverines are lone hunters who hate other wolverines only slightly less than they hate creatures of other species. But he assembled them.

The mob of savage wolverines ambushed the good giant Horace Goodjohn

Christopher one night. They killed him, and they tore his hot flesh off his bones and are it completely.

Well, was the giant Horace Goodjohn Christopher the same person as the giant Saint Christopher of Canaan? His age of seventeen hundred and fifty years would fit just about right. And the mystery of the old faceless straues of Saint Christopher might have been that they were dog-faced statues, and persons might have felt that it was not fitting that a saint should be represented as dog-faced even if it was accurate.

And two days after the death of Horace Goodjohn Christopher, there came further corroboration that he was indeed the same person as ancient Saint Christopher of Canaan. A man came in a truck to the Talking Rocks site in Stone County.

"I travel for the Zolliger Church Goods Company," he said. "If nobody objects, I will take the holy bones of Saint Christopher with me. It isn't seemly that they should lie here on the dark ground and be gnawed on by every animal that comes along. How many thousands of holy relies will they make! A thousand sizeable pieces tould be made from just one of those giant tible bones."

"How do you know that they are really the bones of Saint Christopher?" some-

"Genuine relics authenticate themselves," the church goods man said. "And two nights ago, when I was in a hore! in Jefferson City, I dreamed that the holy bones of the good giant Saint Christopher could be found in this exact spot. I came here and found it to be so."

I myself visited this church goods man, saw the bones and the relies that he was making from them, and was convinced of their authenticity. He even offered me a job selling them. "You are a charming man," he said, "and I believe that you could sell anything." There would be an incredible number of relies made from those bones, and one man could not sell them all. But so far I have not taken the job.

By John T. Woolybear in the Sunday Magazine Section of the Saint Louis Globe, not too many years ago.

"This is the last thing I can ever buy from you, John," the Magazine Section editor of the Globe told John Woolybear. "Were I not retiring at the end of this month I would not dare to buy and publish this. It's outrageous, of course; it's silly; it's garish."

"But a Magazine Section piece cannot be too garish!" John Woolybear

protested. "Everybody knows that."

"Maybe everybody knew it fifty years ago, John," the editor said, "but it hasn't been true for a long time. This is the most inept and outrageous thing that I have ever encountered. But it served my purpose. What better way to thumb my nose at the powers at this newspaper where I have spent so many happy years! What a flood of protests they'll get when this silly thing appears!"

John T. Woolybear took his money and left the newspaper office with a touch of sorrow in his heart. Was it possible that the world was in the process of passing him by? Were flamboyance and garishness no longer wanted in the world? Could it be that even a true account like this one of the good giant at Talking Rocks was too garish and incredible to appear in a Sunday Magazine Section of a Newspaper?

Woolybear felt bewildered. And in his bewilderment he experienced a sudden loneliness for his three wives, the one in Illinois, the one in Nebraska, and the one in Texas.

ž.

STRANGE ACCOUNT OF THE PIKE COUNTY, PENNSYIVANIA, CLONINGS

In the hamlet of Greeley Gulch in Pike County, Pennsylvania, there are authentic cases of cloning. In fact, cloning is the way of life there. In my forty years of checking out strange-but-true stories all over the country! Thave investigated more than one hundred accounts of cloning in various regions and found them all to be false. But now! am prepared to state that the clonings that emanate from Greeley Gulch are authentic.

In another Pike County town of Lackawaxed there was the case of three different sets of triplets going to work in the mill. These nine persons (of the three different sets) were all good workmen and they received good paychecks. But one of the auditors at the mill smelled fraud.

The auditor followed the nine workmen when they had finished work one evening. The nine of them walked behind some ornamental bushes at the front of the mill. Then only three men came out from behind the bushes. And the other six were not behind the bushes. They were nowhere. The auditor followed the remaining three to their boarding house. The three went in, ate their supper, opened their six-packs of beer and watched TV, and then went to bed. Well, the auditor was an adept at looking into windows; that's how he knew just how they sent their evenine.

And in the morning the auditor was watching again. He saw the three rise, dress, ear their breakfasts, and then come out of their boarding house. He followed the three of them to the mill. Near the entrance to the mill, the three ducked for a moment behind some ornamental bushes. Then the full nine of them came out from behind the bushes, went into the mill, and went to work. It was sheer fraud. Three men were holding nine indo sand drawing nine nawchecks.

The auditor followed the nine/three men every evening. And they ate their three suppers and went to their three beds. But on Friday evening, the three basic men went to the bus station instead of to the boarding house. They got on a bus and went away on it. The auditor went to the ticket window.

"Where did those last three fellows buy tickets for?" he asked the ticket seller.
"To Greeley Gulch," the ticket seller said.

I found that in a dozen other towns in a sort of circle around Greeley Gulch the

same thing was happening. The community of Greeley Gulch was guilty of fraud by means of cloning at the expense of all its neighboring towns.

Then I went to Greeley Gulch myself and I found -

"I have read enough," the Editor of the Sunday Magazine Section of the Scranton Scanner told John T. Woolybear. "It's drivel, John. No more, John. You're not the man you used to be, John."

"But read on, Mr. Farmington, Read how I myself went to Greeley Gulch and how I became sure that all the people of Greeley Gulch could clone. Read how I myself -"

"No. John, no." the Editor of the Magazine Section of the Scranton Scanner said. "No more, ever"

"What will I do now?" John T. Woolybear asked himself. "I have always been the best Sunday Magazine Section Feature Story Writer in the World, and I got to be the best by following the adage that a Sunday Magazine Section piece cannot be too garish. I'll not admit that I am wrong about this, but I must admit that the world has gone wrong about it. I've failed to place the last twelve Sunday Magazine Section pieces I've written. And all of them were amazing and all of them were true.

"My STRANGE CASE OF THE UFO NESTS AT WILDCAT, WYOMING was shuffled off as fiction. Fiction? I was there: I learned everything: I even

soloed in one of the Wildcat, Wyoming, UFOs.

"I know that the clonings of Greeley Gulch were real because I myself -"But what's the use of arguing? My life is a bust. I am separated from all three of my wives and I miss them all uncommonly. I miss the one in Illinois. I miss the one in Nebraska. I miss the one in Texas. I must find a way to make things up to all three of them, but it's against the law to make things up with all three of them.

"It's time I hit the road again."

John T. Woolybear went to his own boarding house and pulled his big heavy suitcase out from under the bed. Now it seemed to be bigger and heavier than ever before. He knew he would not be able to go hitch-hiking with it again. It was as if he had become older and weaker in the four days since he had come to town and gone to work for the Scranton Scanner.

"What makes the thing so heavy anyhow?" he asked himself, and he opened up the suitcase. "Oh ves." he said. He took a bulky Fat Air suit out of it. He took a bulky folded-up man-carrying kite out of it. And a bicvcle

pump. It was still a pretty heavy suitcase. What to do?

"I am, after all, a charming man," he said. "At least three persons in this world have found me so. But how will my charm work now? I could go back to Blackberry Patch in Doniphan County, Kansas. I learned their tricks when I was there. I could get into my Fat Air suit, go up in my kite, and jump out. As I am getting to my last years, I would probably glide up instead of down. I could drift into that cloud with its silver lining and its running water and its green pastures, the cloud that is jokingly called the Elephant Graveyard in the Sky. It is exactly over downtown Kansas City, Missouri; two miles over it. And there I would be with all the Blackberry Patch people who have ever passed over to their gloyr. I would be with them, ave; but I'd be as dead as they all are. I'm not quite ready for that yet. "Or I could be oback to Missouri and or to work with that friend of mine

with the Zolliger Church Goods Company. I have heard that he is badly in need of an assistant to sell Saint Christopher relics. That big skeleton broke up into so many thousand genuine relics that there will be good business in them for as long as one can see into the future. But I know that I'd have a done-fleed freling if I wen into that line of work.

"Or I could go back to Greeley Gulch and check in at the Outworker

Agency. Then I would go to one of the nearby towns and get three jobs and draw three paychecks. But great howling thunder! I don't want three jobs. I don't want hardly one.

"But what will I do? There must be something for me. I am, after all, a

"But what will I do? I here must be something for me. I am, after all, a charming man."

He went out of his boarding house and to the variety store.

"Let me see that small suitcase," he said. "Fine, fine, it's just what I want. Let me have three of them. No, no, what am I thinking about! Let me have just one of them."

John Woolybear took the small suitcase back to his boarding house and set it on the floor in his bedroom. Then the little suitcase seemed to become three little suitcases on the floor.

"I am a charming man," John Woolybear reassured himself again. "Three persons in this world have found me especially so. It may be that I won't have to work at all, not if I spread myself properly. And all three of those special persons are well-fixed now, so I have heard."

John T. Woolybear, who had once been the King of the Sunday Magazine Section Fabricators, began to fill the three little suitcases out of the one big suitcase. And, by leaving out the Fat Air suit and the folding man-carrying kite and the bicycle pump and a few other items, he made the transfer perfectly.

Just before dawn the next morning, three men took their places at a good hitch-hiking highway nexus just outside of Scranton, Pennsylvania. . . . The three men looked somewhat alike. Each of them had pale blue eyes. Each of them was flecked with large tan freckles, and each of the freckles had a slight blue ring about it as if it had been drawn by a cartoonist.

The three suitcases of the three men were just alike, almost just alike. Each of the suitcases had a lettered sign on it.

The lettered sign on one of the suitcases read TO ILLINOIS.

The second one bore the sign TO NEBRASKA.

And the third one had the sign TO TEXAS.

When President Reagan gave his "Star Wars" speech, March 23, 1983, he proposed to "counter the awesome Soviet missile threat with measures that are defensive," measures that would "intercept and destroy strategic ballistic missiles before they reach our own soil or that of our allies."

Although the President gave no hint in his speech of what these defensive measures might be, aides later revealed to the news media that the basic concept hinges on placing weapons in orbital space.

Satellites in orbit a few hundred miles above the Earth's surface can be in a position to destroy hydrogen-bomb-carrying ballistic missiles within a few minutes after they are launched. While they are sill rising above the Earth's atmosphere, and their boosting rocket engines are still working, the missiles are very vulnerable. If they can be hit then, they can be destroyed relatively easily.

But a defensive shield in space could destabilize the balance of terror that has been the corneratione of U.S. and Soviet relations for more than twenty years. The policy of Mutual Assured Destruction (MAD) assumes that no defense against missile attack is possible: if one superpower launches a nuclear attack, the other can retaliate in kind. When Reagan proposed a defensive system that would "save lives rather than avenge them," the typical Russian response was, "Why do you want to attack us?" Soviet leaders see any attempt by the U.S. to defend itself against nuclear attack as a preparation for American nuclear attack on the USSR.

Thus the arguments over "Star Wars" include questions of politics, policy, and technology. Is it necessary to put weapons in space? Should the Congress appropriate hundreds of billions of dollars to build space-based defenses? Is it wise to shift American strategic policy away from MAD, a policy which — whatever its risks — has kept the superpowers from nuclear war for more than twenty years?

Before these questions can be gainfully addressed, however, the technology question must be considered. Will space-based weapons work? Will they be able to stop a nuclear missile attack?

Åmong the weapons being considered for the space-based ABM (Anti-Ballistic Missile) rôle are high-power lasers, particle-beam devices, small missiles, and electrically-powered "rail guns" which fire small metal darts at very high velocities. Lasers and particle-beam devices are often referred to as Directed Energy Weapons (DEW) or, more simply, Beam Weapons. Of these four types of weapons, lasers are the most commonly discussed and may well be the first type actually tested in space. The laser has distinct advantages as a space weapon. It fires a beam of light — pure energy. Nothing in the universe moves faster than light's velocity of 186,000 miles per hour second. By comparison, a missile flying at 15 to 20,000 miles per hour seems like a turtle. In the vacuum of space, the laser's beam moves in a perfectly straight line, undeflected by gravity, electric or magnetic fields, wind or weather. Not only is the laser "the fastest gun" in the universe; it can be the most accurate, as well.

Small missiles are already being tested by the Air Force as an antisatellite (ASAT) weapon. Carried under the wing of a high-altitude F-15 jet
fighter, the ASAT missile rockets into space, where it can seek out a satellite
and destroy it by direct impact. Similar missiles could be used in the ABM
role, carried aboard satellite "trucks" in orbit until they are needed to intercept enemy missiles. Their technology is well understood and highly developed. But missiles cannot give the speed and range that a powerful laser
would. Laser beams could cross thousands of miles in a fraction of a second.
This means that fewer defensive satellites would be needed, because each
laser-armed satellite would have a "reach" that extends far beyond the limited range of small missiles.

Particle-beam weapons are somewhat like lasers; they fire streams of subatomic particles such as protons and electrons instead of a beam of light. The particle beam can move at the speed of light. It must be an electrically neutral beam: negatively-charged electrons or positively-charged protons by themselves would be deflected by the Earth's magnetic field. While some analysts such as retired Air Force Maj. Gen. George J. Keegan insist that the Soviet Union is pushing development of particle-beam weapons, most western scientists feel that such devices are not yet as fully developed as lasers.

Rail guns, which can accelerate dart-like *flechettes* to velocities of better than 11,000 miles per hour in less than a second, are even less developed than particle-beam devices.

Lasers have reached power levels where they can be used as weapons, although they may not yet be powerful enough to destroy missiles in space.

In 1983 the Air Force released news that a 400-kilowatt laser flown aboard its Airborne Laser Laboratory (a specially-outfitted Boeing cargo jet) had successfully shot down five Sidewinder missiles fired at it by a jet fighter plane. The test rook place high above the Navy Weapons Center testing grounds at China Lake, California. Sidewinders are missiles that U.S. fighters use to destroy other planes: air-to-air missiles. Although the laser did not destroy the Sidewinders, it damaged their heat-seeking sensors so severely that the missiles could not find their target and crashed into the desert.

TRW Corporation has built a laser of 2.2 megawatts (2.2 million watts)

output for the U.S. Navy. Although it is not intended to fly, this laser is approaching the power range of interest for orbital ABM weaponry. It is called MIRACL, a somewhat whimsical acronym for Mid-InfraRed Advanced Chemical Laser. Installed at the White Sands Missile Range in New Mexico, it is used by all three armed services to study the mechanisms by which laser energy damages target materials such as the metals and plastics of which aircraft and missiles are constructed.

Damage mechanisms are an important consideration in deciding which devices may be tested in space and eventually deployed. Missiles and rail-gun flechettes use the "Sinetic kill" approach: like super-sophisticated shorgun pellets, they simply smash into the oncoming missile or bomb-carrying warhead. The target's own forward velocity of more than 15,000 miles per hour merely adds more kinetic energy to the shattering collision.

The basic kill mechanism of a laser beam is to heat the target's surface so quickly and intensely that the material is vaporized. A laser that can focus many kilowatts or megawatts of pure energy per square centimeter on its target will cause damage similar to the kind that Buck Rogers's "distintegrator" gun did in the comic strips of fifty years ago. The skin of a missile can be boiled away by the searing finger of a laser beam, which can punch a hole in the missile's short in a sweet control or less. If the missile's socket engines are still burning, and its tanks still contain volatile rocket propellants, rupturing the tankage will blow the missile apart in a spectacular explosion.

However, the metal boiled up by the laser beam creates a cloud that tends to absorb incoming laser energy. To counter this, the beam might be pulsed many times per second so that the cloud created by the first pulse of laser energy dissipates before the next pulse arrives. The pulses could be thousandths of a second in duration, or even shorter. Very high-energy pulses could also damage a missile or warhead by mechanical shock, literally shaking its innards apart. A very energetic pulse would blast a small crater in the target's surface and send a shock wave penetrating into its interior. A train of sufficiently energetic pulses could rattle a missile or hydrogen-bomb warhead to pieces.

A particle beam could also deliver a massive jolt of energy to its target. It would not be absorbed by clouds of gas, as a laser beam would be. Nor would it be reflected by a shiny surface or absorbed by an ablative coating. It could penetrate the metal skin of a missile or even the "hardened" heat shield of a re-entry warhead within microseconds. The beam could shockheat the inner workings of a nuclear bomb, destroying its electronic controls or damaging the triggering mechanism so badly that the bomb would not detonate.

There are many different kinds of lasers, but the type that appears to be closest to actual testing in space is the chemical laser, so called because its energy is derived from the chemical reaction of two or more "fuels," such as whydrogen and fluorine. Chemical lasers emit infrared energy, at wave-

lengths of light that are invisible to the human eye.

Edward Teller, "father of the H-bomb," is urging the development of a laser that produces X-rays. It is powered by the explosion of a small nuclear bomb; thus the X-ray laser has been called a "third-generation nuclear device" (the first two generations being the fission-based atomic bomb and the hydrogen fusion bomb). Since the end product of Teller's third-generation bomb is a laser beam of X-rays, the system is also called a "directed nuclear device."

The technical community is also excited by the more recent development of excimer lasers, which can emit energy at ultraviolet wavelengths.

But the basic question remains: Will lasers, or any of the proposed space weapons, actually be able to defend against full-scale strategic missale attack? Many scientists and strategists believe that it will be impossible to destroy thousands of missiles and their multiple warheads with orbiting weaponry. Dr. Robert Bowman, former director of advanced space programs for the Air Force, says that "every dollar spent on defense can be neutralized by five cents of offense."

Perhaps the strongest voice speaking against the concept of space-based defense belongs to Kosta Tsipis, associate director of the MIT physics department's Program in Science and Technology for International Security.

"We are witnessing a tragedy...a cruel hoax," he told me, "a repetition of the pattern that saw the government spend \$2 billion on a nuclear-powered airplane in the 1950s."

Tsipis is convinced that neither lasers nor particle beams can be made to work well enough to serve as ABM weapons. Writing in Scientific American's April 1979 and December 1981 issues (and later including much the same material in his book, Arsenal: Understanding Weapons in the Nuclear Age), Tsipis concluded that it was "difficult to see how the development and deployment of such fragile, complex, and expensive weapons would improve the military capability of a nation."

He says quite firmly that the "dream" of orbiting energy weapons capable of destroying ballistic missiles is simply "not physically possible.... There are no weapons applications for existing lasers," and even if much better lasers are developed "the operational difficulties" will make orbital ABM systems impractical.

"The President has no sense of the physical reality" of such devices, Tsipis feels. He believes that Reagan is "trying to stampede the country" into pushing ahead with such a program because "it is good for the California industries, and good for negotiations" with the Soviets.

In his writings, Tsipis concludes that a laser ABM weapon cannot put enough energy on a missile to destroy it, especially within the few seconds after launch when the missile's rocket engines are still burning and it is most vulnerable. He believes that a laser-armed sarellite would itself be so vulnerable.

able to attack and so expensive that it would have no real military value.
"We have concluded that lasers have little or no chance of succeeding as practical, cost-effective defensive weapons."

Tsipis shows that an orbiting laser must be pointed at its target with extraordinary accuracy: "... for a laser weapon to destroy its target the position of the target must be known to within a distance equal to the shortest dimension of the target [the width of the ICBM booster rocket], and the

laser must be pointed with the same precision."

He sets up a scenario in which 50 laser-armed ABM satellites face an attacking force of 1000 missiles, which they must destroy within eight minutes of launching. Under these conditions, only a single satellite would be in a position to engage the attacking force; the other 49 satellites would be nothing over different areas of the globe, too far away to deal with the attacking missiles within the first eight minutes of their flight.

"Therefore," Tsipis writes, "the [lone] satellite could devote only about had a acoud to each missile." He estimates that a 100-megawatt chemical laser would need a pointing mirror four meters wide (slightly more than 13 feet) to put enough energy on a missile at 1000 kilometers' range to destroy it within a second. "Making such a mirror sufficiently rugged and of the necessary optical quality, however," he states, "is beyond the technical capabilities of the U.S. or any other nation."

Moreover, Tsipis calculates that the chemical laser would need nearly 1500 pounds of fuel for each missile destroyed, which means that each satelitie must be supplied with roughly 750 tons of laser fuel, because one cannot tell in advance which satellite might face the entire attacking missile fleet. Since the space shuttle carries about 30 tons of payload, each satellite would require 25 shuttle flights just to "fill' erup." The entire system of 50 satelities would require 1250 shuttle missions merely to fuel the lasers. Even if shuttles were launched once a week to do nothing except carry fuel to the orbiting lasers, it would take more than 24 years to bring all of the 50 orbiting lasers to a condition of readiness.

Tajpis believes that even these conditions are "unrealistically optimitic;" since a 100-megawatt chemical laser does not exist "and there is no indication that such a device could be developed in the foreseeable future." Moreover, his calculations were based on a 100% efficiency for the laser, whereas in reality the best that might be expected is 30 to 40 percent efficiency. Thus the fuel requirements would balloon "by a factor of at least 10 and more likely 30:"

Finally, Tsipis points out that lase-armed satellites would be vulnerable to ountermeasures. They could be attacked while under construction in orbit, their sensors could be blinded by the attacker just before the ICBMs were launched, or their communications links to command centers could be iammed.

Bowman, Tsipis, and others have shown that the attacking missiles could

be protected from laser beams by shiny, reflective coatings on their surfaces, or by blowing a stream of laser-absorbing fluid along the missile's length. The re-entry warheads are already coated with heat-absorbing ablative materials; the entire length of the missile could be "painted" with an ablative plastic. An even simpler countermeasure would be to increase the number of attacking missiles until the defensive system was overwhelmed.

Daniel Deudney, senior researcher at the Washington-based Worldwatch Institute, brought out another cautionary point in his 1983 testimony to the

Senate Subcommittee on Arms Control.

"Large-scale space weapons would be an example of what I call a destruction entrusted automatic device (DEAD). Space weapons could never be commanded and controlled by humans. A space laser, for example, would have about five minutes to detect, target, and engage an ICBM in the boost phase. One Department of Defense analyst put it this way: We would have to delegate the decision-making to the weapon system itself and we have had no experience in that type of operational system. To start a nuclear war in the MAD era would have required a major political misjudgment; with space weapons a machine malfunction would be sufficient?

Tsjpis and other scientists in the academic community complain about their lack of access to the President. "We don't have a voice in the Oval Office," he claims. "The White House has cut itself off almost completely from the academic community." He maintains that President Reagan relies on industrial scientists, especially those employed by the major acrospace.

corporations, for his scientific advice.

One of those "industrial scientists" is Edward T. Gerry, a youthful physicist who headed the effort at Avco Everett Research Laboratory, in Massachusetts, in the mid-1960s which produced the breakthrough to high-power lasers.

Gerry went into government service in the 1970s to become chief of all laser programs for the Defense Department's Advanced Research Projects Agency. Today he is president of W.J. Schafer Associates, a Washington-area research and development firm.

When I asked Gerry about the criticisms voiced by Tsipis and others, he said flatly, "Tsipis is wrong. The articles he's written are misleading. He sets up 'straw man' arguments that are based on false assumptions." He took Tsipis' example of a 100-megawatt laser and analyzed the situation this way:

Such a laser is powerful enough to put at least 10 to 100 kilowatts per square centimeter of laser energy on the skin of a missile, over a range of more than 1000 miles. That much energy on the missile will boil away enough of the metal within one second to make the missile's structure crumple and destroy the missile. While Tsipis makes the point that "shiny aluminum" will reflect all but four percent of the infrared energy from a chemical laser, Gerry maintains that four percent of the energy from a 100-megawatt

laser is quite sufficient to destroy the missile, even assuming that its metal skin is protected by an ablative coating.

Every pound of material used to protect the missile, Gerry points out, is a pound taken away from the payload. For purposes of calculation, he assumed that the protective ablative coating reduced the weight of the missile's warhead by 20 percent. "The more protection you build into the missile, the smaller its payload [the warhead] becomes;" he says. Protecting the ballistic missile costs the attacker kilotons of explosive power.

The biggest point of difference between Tsips and Gerry is over how many ABM satellites would actually be in position to engage an attacking force of 1000 ICBMs. With 50 satellites in orbits about 600 miles high, Tsip is assumes that only one will be in the right place at the right time, and therefore one laser weapon must take on the entire attacking force.

"But missiles don't all come from the same point," Gerry maintains. Soviet ICBM silo "farms," are strung out over thousands of miles, mainly along the Trans-Siberian Railroad. Gerry feels that at least one quarter of the satellites — say, 12 of them — will be in position to engage the attacking missiles. This means that each laser weapon will have to engage between 83 and 84 missiles within a time period of roughly 300 to 400 seconds. That gives each laser somewhat more than one second to attack each missile, with another second to locate and target the next missile. "That's not pushing any physical limits whatever," Gerry claims.

One second is a very long time for modern electronic equipment. Human comprehension of time is based on the human pulse rate, less than 100 beats per minute. Computers can perform operations in *aanoseconds*, billionths of a second, or less. There are as many nanoseconds in one second as there are seconds in 32 years.

Gerry flatly contradicts Tsipis' statement that a four-meter (13-foot) miror is "beyond the technical capabilities of the U.S. or any other nation." For a 100-megawart chemical laser, a four-meter-wide mirror would reflect 800 watts from each square centimeter of its surface. "Mirrors that handle a hundred times that flux have already been operated," Gerry says, although he admits that such mirrors have been considerably smaller than four meters. "But there's no reason why such mirrors can't be built."

Gerry agrees that it would take roughly a metric ton of laser fuels to shoot down a missile. But since he envisions a dozen satellites engaging the attacking missiles, it is not necessary to provide each and every satellite with enough fuel to destroy all 1000 ICBMs. One shuttle payload should be enough to down 25 missiles. Forty shuttle flights could carry the laser fuels to destroy 1000 missiles. But since only a quarter of the satellites in orbit will be in position to engage an attacker, each satellite must then carry four times as much laser fuel as the simple numbers would affirst indicate. This means 160 shuttle flights should bring the 50-satellite system to a state of readiness.

One hundred sixty shuttle flights is a formidable task. If all four existing space shuttles were devoted to nothing but such "fuel runs," and they were launched at a rate of one mission per week, it would still take slightly more than three years to "top off" all 50 satellites.

Lowell Wood, of the Lawrence Livermore National Laboratory in California, where the work on Teller's nuclear-powered X-ray laser is being carried out, is even harsher in his criticism of "Tsipis and his group at MIT." In an interview in Defense Science and Electronics magazine. Wood stated

that Tsipis' December 1981 article in Scientific American:

".. was premised on political and not rechnical grounds. It was riddled with fundamental technical faults ... These were not fundamental, unavoidable physics problems that Tsipis was pointing out. They were technological burdles to be cleared. They have all been cleared. Tsipis was flogging a dead horse."

Although the scientists are at odds about the possibility of making laser weapons work well enough, and at powers high enough, to destroy ballistic missiles, the government is pushing ahead with its plans to do enough research and engineering to reach the point where decisions can be made about deploying a space-based system. Based on studies by panels of scientists and strategic analysts headed by Defense Under Secretaries Richard DeLauer and Fred Iklé, the research and engineering are estimated to cost between \$18\$ and \$27 billion.

Space-based defenses may one day be able to destroy ballistic missiles within minutes after they are launched. But what about nuclear bombs carried by airplanes or low-flying cruise missiles? What about nuclear devices smuggled into a city by terrorists aboard a ship or even in a smallish van?

There are three points to be made:

First, if space-based defenses do nothing more than prevent missile attack, they will have made an enormous contribution to peace and survival. They will have moved humankind away from the fearful specter of a thirty-minute, push-button war which ends with the entire northern hemisphere devastated and the onset of Nuclear Winter.

Second, if missiles can be destroyed within minutes, much the same technology can be used to stop the slower airplanes and drones that might carry nuclear bombs. The defensive weaponry can be based on the ground, at sea, or aboard aircraft just as well as in satellites. While atmospheric effects may trouble laser and particle-beam systems, the "Kinetic kill" weapons will work just fine here on Earth. And the electronic detection, pointing, and tracking "brains" that run the ABM satellites will find supersonic aircraft easy targets. There are even a few bold scientists like Wood who hint that lasers will be able to destroy targets despite the absorption and beam-disrupting problems of the atmosphere.

Third, this kind of defensive weaponry will probably be of little use against suicidal terrorists armed with nuclear bombs. But that is a different

order of problem. Terrorists may one day destroy a city, or several cities. But they will not be able to produce the kind of instantaneous holocaust that is threatened by the thousands of warheads resting atop their ballistic missiles today. Stopping terrorism calls for political action.

Space-based defenses can stop World War III. That should be a powerful incentive for moving ahead with the research needed to prove out the funda-

mental concepts.

We may be witnessing a new era in international politics, the first real change since the reign of nuclear terror began at Hiroshima. As Winston Churchill once said, "This is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."

Ben Bova, president of the National Space Institute, is the author of Assured Survival, an examination of the implications of new defensive technologies, from which this article was developed. He was manager of marketing for Avco Everett Research Laboratory in the 1960s, when the first high-power lasers were developed.

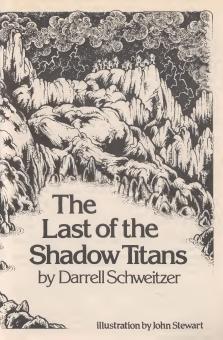


MOVING?

If you're a subscriber to AMAZING® Science Fiction Stories and you're planning to move, remember that you have to tell us your new address in advance to guarantee uninterrupted delivery of your subscription. Give us at least 4 weeks' notice (8 weeks is even better), and inform us both of your old and your new addresses with a simple note or postcard, or by filling out and sending us one of the change-of-address cards available at your post office.

Send your change-of-address notification to AMAZING® Science Fiction Stories, Subscription Dept., P.O. Box 110, Lake Geneva WI 53147.





Mr. Schweitzer informs us that by the time you are reading this, he will have finished his current project, Conan and the River of the Dead, for Tor Books, "Think of it as my Star Trek novel," he says cryptically.

Other recent Schweitzerian efforts include a non-fiction anthology, Discovering Modern Horror Fiction (Starmont House), and a critical study, Pathways to Elfland: The Writings of Lord Dunsany (Owlswick Press). He is working on a fantasy novel set in the Late Roman Empire. His first novel, The White Isle, was serialized in Fantastic™ in 1980. He is also the author of We Are All Legends and The Shattered Goddess.

The island stood up in the purple twilight, thundering, its legs massive as mountains, its torso blotting out the sky. The head of the creature, misshapen in silhouette against the sunset, was the island as mariners saw it. The head alone remained above the waves all day, as the huge body crouched in the sea, sand and stones and driftwood encrusting its enormous face. Now it stood raging, water pouring from the crevices of its dark flesh. Waves foamed and broke around its knees

Oineras the Knight Inquisitor beheld all this from a small boat. Even he. the most hardened of all the servants of the Nine Gods, was filled with amazement and terror

The boat rocked in the rough water. He clung to the gunwales, Kadmion, his apprentice, struggled at the oars. "Keep at it, boy. Don't look."

But Kadmion looked.

"Boy! I told you - do you need blinders?"

It was too late. The boy saw the giant-thing with an island for a head standing tall against the sky, hurling thunderbolts from either hand until the horizons flickered in reply. The whole earth trembled. The thing conversed with gods other than the Nine known to the righteous.

Kadmion screamed, let go of the oars, and fell to the bottom of the boat, writhing, his hands over his ears, his arms blocking his tightly shut eyes.

"Master! Save us! I hear it thinking! It is filling me up! It -"

Vedatis, last of the Shadow Titans, sent forth a dream into the world. In distant lands, men and women of vision fell down in ecstasy. Closer at hand, Kadmion perceived it clearly.

The boy shared the memory of the Titan and knew, as if it had been his own life, a tale as old as time. He saw the Nine Gods, newly born, walking through the fields of Heaven. They came to a rising of the land and there beheld the first sunrise. Then they turned, and saw their own shadows cast upon the fields, flowing like dark rivers into the void of Unbeing, which lay

Kadmion knew all this, as vividly as if he had been there, and he felt the terror of the Gods when their shadows drew strength from the Unbeing, and sprang up, and defied them. These were the Shadow Tirans, the equal and opposite manifestations of the Gods, the sowers of wild discord and darkness amidst the purity and order and brilliant light of the Gods. There was a Titan of Fire, and one of Earthquakes, and Sedengul, the Master of Wind and Snow, and Aradvas, the Lord of Lust, and also Vedatis, the Titan of Dreams.

The Titans fled from the Gods, shrieking, laughing, trailing the darkness of the night sky behind them like a banner. The Gods pursued, separating the light from the darkness, and the Earth was made, and covered over with lands and seas, with beasts and men. But the shadows of the Titans fell upon the Earth and changed it beyond the understanding of the Gods. Seas raged. Beasts slew one another. Men dreamed the dreams Vedatis sent them, and knew strangeness and beauty and terror and death.

So the Gods spoke to the worthiest of men, and filled them with their spirit, and sent them forth to battle the Shadow Titans. Many were afraid. Many more were enraptured by the dreams Vedatis sent them, and strayed from their mission. But, in the end, those heroes of the first generation of mankind killed eight of the nine Titans, as the Gods had commanded them. But the world did not return to purity and order and light. It remained mostly as it had been, for Vedatis secande.

Vedatis was the most elusive of the Titans, and had never entered the battle directly. Instead, to protect his brothers, he reached out and touched the minds of men, giving them visions, saying, "Now that you have seen the great Dream, which is a vast ocean on which your world floats, now that you know, truly, what it is to be alive, to dream, how can you ever put all this saide?"

But the sternest of men prevailed. Vedatis fled, disguising himself as a whale, as a whirling storm, as a swarm of bees, as a sound in the night, and, finally, when he had not the strength to flee further, as an island.

All this filled the mind of Kadmion, and he fell down screaming. It touched the mind of Oineras but lightly. He dismissed it as an idle fancy. Oineras never dreamed.

But he knew the tale. The heroes of old told it to their sons, and they to theirs, and so on through the generations of mankind. Many fell away, ensnared by the dreams of Vedatis, but those who remained, who remembered their ancient mission, became the Kniehts Inquisitor.

There were not many left. However, there would soon cease to be any need for them.

For Oineras knew the ending of the tale.

Oineras had come, at last, to kill Vedatis, the Titan of Dreams.

side. Oineras lurched forward to grab the oars before they slipped from the oarlocks. He sat there awkwardly, holding the oars, regarding his apprentice.

It occurred to him with some exasperation that while Kadmion possessed sufficient piety in his own way to become a Knight Inquisitor, and this was a rare thing in this decadent age, the boy otherwise left a great deal to be desired.

He prodded him with his foot, splashing.

"Get up, you fool!"

Kadmion screamed, then fell silent, then began to weep softly. "It is so beautiful," he said. "The dream. I am lost in it. I can't find my way back. I -"

Oineras made to kick him in the ribs, but he controlled himself. A Knight Inquisitor is always controlled, he reminded himself, serene in his faith.

He pulled the oars into the boat, then lifted the boy up.

"Get up," he said gently. "Do not be afraid. Remember that we are servants of the Nine. They are with us."

Half-conscious, fumbling, the boy sat, and with his master's help got the oars back where they belonged. More water slopped into the boat. The boy began to row, mechanically, like one in a trance.

"What did you see?" Oineras asked.

"I cannot say. Some of it was about the Gods and the Titans. Some of it . . . I was in the dream, and I can't describe it. . . ."

"Were you afraid?"

"Yes."

Oineras said nothing for a minute. Then he smiled very slightly.

"You are my bloodhound, Kadmion. You are leading me to my prey."

The boy turned the boat's bow into the waves. He rowed vigorously now. He did not look over his shoulder. Oineras removed the ornate, peaked cap of his office and bailed with it.

"Think of it, my boy," he said, "In a short while your dreams will end, Then the purity of the Nine will fill you, and you'll want nothing. This is what we believe. In the meantime, your suffering serves the cause of righteousness. Be brave. Be a hero. You can, you know. You can."

Oineras looked up once and saw dark clouds close like a curtain over the stupendous figure of the Titan. Lightning flashed beneath the low, dark ceiling of the storm. White-ridged waves ranged before them, blocking the island from view.

They dragged their boat onto the beach in the driving rain. Surf thundered on the rocky coastline. Water hissed on sand, Pebbles rattled. They hid the boat far from the water's edge, among some boulders, then set out for the island's interior.

"Master? What if it stands up again? Won't we fall off?"

"A true servant of the Nine has no fear. Just follow me. Bring my bag." Kadmion followed, carrying his master's cloth satchel. They climbed sweeping curves of stone. It seemed to Kadmion that the wind blowing through the crevices was shouting No, no, no half in anger, half in fear. It seemed. Oiners paid it no heed.

They passed between two mountains with enormous faces carven into them, blank faces, like almost featureless masks. The mouths of both gaped. From one came thunder, from the other, mist.

Beyond the mountains was a plain, wholly desolate.

"Does anyone live here?" Kadmion asked, almost forgetting where he was, thinking of the island as an island.

"There may be corrupt and depraved men, who have strayed far from the truth of the Nine Gods, and have been transformed strangely by Vedatis, that they might be better servants to him. Such as they might live here, but no righteous man."

Oineras was reciting, as he did every day when instructing his pupil. Kadmion found the familiar, firm tone comforting.

Still wind howled across the land. The curves of stone were like a seastorm frozen in place.

The ground trembled.

After a time, a light appeared, flickering in the darkness. As they neared it, it steadied.

"It is one of the eyes of the Shadow Titan," Oineras said. "Let us prepare ourselves."

In a place where the land dipped and folded over itself, forming a shallow cave with a ledge above it, the two of them Rnelt before the bag Kadmion carried. Oineras opened it and took out a bottle of ointment made from the tears of the Nine Gods. He and Kadmion stripped, shivering in the cold wind, and anointed themselves. Then they put on long white robes, pulling white hoods over their heads. Finally, with special rite, they donned masks of gold wrought into simple, identical faces.

Kadmion paused before putting his on. He recognized the face. It had been carven on the mountains.

"These masks, these robes," whispered Oineras, "are the garb of the unholy priests of the Titan. Yes, there are such. They call themselves Brothers of the Dream. We will probably meet some before our mission is over. Now hurry. Put it on."

The boy obeyed.

In the bottom of the bag was a sharpened stake of eru wood, which is sacred to the Gods. It is an eru tree which forms the axle of the world. The stake had been hardened in holy fire for ten days and nights. Kadmion knew. He had labored hard over it. Now Oineras hid it beneath his robe.

All was in readiness. After a prayer to the Nine Gods, they set out toward the light, which was the eye of the Titan.

"It looks like a window to me," said Kadmion.

"That is only an illusion, but for now it will be convenient to think of it as a window."

It was the window of an inn, situated in the middle of a tiny village. There were no more than a dozen tumbledown houses, all of them dark and silent. Everyone seemed to be at the inn, singing a raucous bymn to gods other than the proper Nine, to shapes which rise out of the darkness of the Dream to beruile men.

Oineras knocked on the door. Rainwater ran from his sleeve. Kadmion's

teeth chattered as his drenched robe clung to his back.

The door swung inward to the Knight Inquisitor's touch, and the two of them entered a wide room lit by a roaring hearth fire.

The hymn ceased. There were twenty people in the room, perhaps men, perhaps women, all dressed in hooded white robes and nearly featureless golden masks.

For a time, no one spoke. Flames crackled. Rain rattled on the windows. Kadmion looked longingly toward the fire, still shivering in his wet robe. But he stood by his master.

"Who are you?" demanded one of the many. "You are not of the body of Vedatis, our Father."

"You are not of the Dream," said another.

"Truly we are of his dreams," said Oineras. "We have wandered long in the dark spaces between the worlds, until Vedatis summoned us into wake, fulness on this island. We have come to join you."

"This has never happened before."

"Vedatis turns in his sleep, and new visions come to him. For everything, there is a first time."

"And this is it," said Kadmion.

Oineras unobtrusively stepped on Kadmion's foot, hard.

"Then join us," said one.

They joined them in singing the blasphemous hymn. Oineras knew that the Gods would forgive him this means to so righteous an end. Kadmion merely did as the others did.

Vedatis, dreaming the dreams of a corrupted world, trembled. Crouching in the cold sea, he was aware of something moving across his face, like an animate coal burning his stone flesh.

He opened his eyes, and every window in the village blazed with light. Mountains were tipped with fire. He spoke with his many mouths, where the wind touched caves and craters and ravines and gave him a voice. But he could not find his enemy.

His dreams were troubled. He turned in his sleep.

In the houses, timbers creaked. Tiles fell from rooftons, pottery from shelves.

There was a feast of meat and fruit and wine, all served from a bowl that never neared empty. Each of the company carefully raised a golden mask a little while eating, so that faces were still concealed.

Kadmion heard muted voices, the tinkling of bells, leather creaking, faint music. He looked up and saw phantoms step from the shadows in the corners of the room: kings, warriors, priests and priestesses of past ages. Their costumes were beautiful and strange, their faces very pale. Their procession circled the table, and the walls of the inn behind them shifted as the phantoms moved, and it seemed that the table and the diners were no longer inside a building at all, but on a mountaintop, beneath a clear night sky filled with stars. There were faces visible behind the stars, like giants staring through dark glass into the universe; the dim, incomprehensible visages of the forbidden Gods of the great Dream.

The boy wondered if anyone else could see this. Oineras sat still. He made no sign. The others went on with their meal.

Then the sky rippled like a reflection on water when a stone is cast in, and the scene changed. They were in the great hall of a castle. It changed again: the deck of a great barge, all hung with black drapery, afloat on a fog-bound sea.

And further; a green meadow on a spring day, beneath a bright sky scattered with white streamers of cloud. He knew the meadow. It was near his home. He recognized a tree he had once climbed. A company of people were coming toward him over the grass, festive, laughing. He knew them all. They were people from his own village. His parents were there, whom he had not seen in four years, since he was ten and was sent to be the apprentice of the Knight Inquisitor.

He wanted to call out to them. He wanted to join them. He started to rise from the table.

Then the feast was done, and all of the company raised their hands, and the walls of the inn were as before. Kadmion sat down. As the many watched, two carried a large mirror into the room and stood it before the table. All turned so they could see. The room was still, and silent but for the rain, the wind, and the crackling flames.

They watched, as an image formed in the mirror, at first something huge and misshapen, like the half-finished work of a mad sculptor, and then, as the features slowly diminished and straightened, one dressed in a white robe and wearing a golden mask.

"Hail Vedatis, our Father," said the many, sliding from their chairs, kneeling. 'Rise," the thing said, extending its hand out from the glass, into the air. They rose, and this manifestation of the Shadow Titan told them the secrets of the Gods of the Dream and also of the Nine, and the histories of the aeons before ever those Nine walked the fields of Heaven. Vedatis lived outside of time, and could see the past and future even as a man turns his head to the left and to the right.

He spoke of what was to come.

"A long tale is coming to an end," he said. "A quest is almost complete.

For one, there is only resignation, a sinking into a final sleep without dreams. One is very old, very tired. One senses the ending very near at hand. For another, the tale does not end. It is only beginning. For this other there is, perhaps, a revelation."

For a second time, if only for an instant, the Knight Inquisitor was afraid, sure that he had been discovered, but the remark seemed to pass along with numerous other prophecies. He and the boy were not molested.

In the end, the image vanished, and the mirror was carried away. Once more the walls rippled like water, and the humble inn was transformed into a vast palace of white marble. Richly-liveried servants, all wearing golden masks, conducted each of the company to chambers for the night.

Oineras and Kadmion stayed together. They were put in a single chamber draped with something like silk, but cold and rigid to the touch, like tapestries of ice. The shape of everything was uncertain. Whenever either of them gazed upon a certain spot, then looked away, then gazed again, a wall or a corner or a bedpost would be fashioned differently.

There was a single bed, covered with tattered blankets. The tatters waved

gently, like the limbs of a sea anemone. Oineras took out the eru stake, touched it to the bed, and the blankets became mere cloth.

He directed Kadmion to lie down, Reluctantly, the boy did, Oineras knelt

beside him, stake in hand.

"Now sleep, and spy out the defenses of our enemy. When you come to the very center of the Titan's dreams — we are in a labyrinth, very near to the center now — the truth and the weakness of the Titan will be revealed. It will be like a door, through which we enter in to find the evil one before us. Go. Go before me."

He laid the stake on the bed next to Kadmion.

The boy slept.

Vedatis felt his strength draining into the ocean around him. The burning sensation was remote now, like something felt by someone else. He was tired. His legs were weak. He knew he would never rise again. He felt the waves wearing at the shortline, reducing it to sand.

Still he dreamed his dreams and sent them forth, into the minds of men, but he could not concentrate, and they were brief, fragmentary things, halfglimpsed, like the wines of bats fluttering in the dark. * * *

Kadmion saw a peacock with flaming, jeweled feathers soaring into the

sky, scattering jewels, which became the stars. The bird itself became the moon, pure white, without feature.

In the darkness, beneath the star-filled sky, he recalled idle fancies from

In the darkness, beneath the star-filled sky, he recalled idle fancies from his childhood.

Once, when he was very small, he had imagined that he had heard voices outside his window at night, urging him to come out into the forest beyond the meadow, to hear strange songs, to see wondrous things.

"How far is it?" he asked. "How long do I have to go?"

"Forever and ever," said the voices.

Now he walked through the forest, and it seemed forever. Trees stood in black silhouette. The clearings were filled with delicate silver. The forest was alive. Always, just ahead of him, beyond the next great stand of trees, the voices called to him.

"Forever and ever. Into the Dream."

He followed -

She was there, by his side. There was a girl he had known in a city where he and Oineras had dwelf for a year. That was much later. He had not heard the voices then. But now he heard them, and she was with him. Usually, she paid little attention to him. But sometimes she had laughed when he tried to rell a joke — laughed with him, not at him as everyone else did, but with him or paused to listen when he played upon a pipe. He had never been in love. His master had not allowed him time for that. He wondered what it would be like. Maybe later. He was not very old yet.

Now he walked with her, hand in hand, through the forest in the pale mognlight, until they came to a hilltop he knew, where the trees ended and they could look for miles, toward the sea, where the moon shone silver on the waves. The two of them stood for a long time, imagining strange lands beyond the horizon, telling one another tales of kings and queens and wize.

ards in golden palaces.

He could see the palaces clearly now.

Then he heard a voice calling him. He couldn't make out what it said. He looked up, and saw that the moon had a face on it. For an instant, it was his master's face, but then it became another, a wild face, more beautiful and terrible than anything he could imagine.

He screamed and turned away, and found that he was falling slowly through a forest of delicate glass, spinning through the treetops, sending showers of shards whirling in his wake. He was not afraid. There was no pain. He felt only an intense longing, as if he had almost beheld something more wondrous than anything in the world, but had lost sight of it before understanding what it was.

He was alone, in the darkness, falling, and the whole forest began to disintegrate at his passage.

With the very last of his fading strength, knowing that the great Death had settled on him and that the Dream was finished, Vedatis the Shadow Titan stood up one more time.

His body did not come with him. It fell away like a heavy cloak.

He walked upon the shore of the sea, and the waves broke against his legs. He thundered in the marble palace, in the darkness, and lightning flick-

ered in the great halls.

He came to a door. He felt his enemies within, like a hot coal burning on his face. He wrenched the door from its hinges; the whole wall exploded into dust. Cracks spread through the floor and ceiling. Pillars fell. Corridors folded in on themselves in clouds of debris.

Kadmion woke to the sound of thunder. He blinked. The room was dark and filled with dust. His master hauled him up out of the bed, as the floor shook, as a huge beam fell from the ceiling with a thud and a shower of stone, crushing the bed.

The ice tapestries were melting, shattering. The walls caved in from every side

Then Oineras held up the stake of eru wood and shouted the names of the Nine Gods, slowly, pronouncing each carefully. With each name, the sounds receded, the debris seemed to fall further off.

In the end they stood together, in silence, in a grey fog. Kadmion shivered in the cold.

"Did you see him?" Oineras whispered.

"Yes."

"Did he say anything?"

"I think so. But I couldn't understand it."

"That is just as well. If you had, he might have entrapped you."

"Where is he now?"

"Very near. Come. Maintain the courage of the righteous. Victory is ours."

Kadmion was not as confident as his master, but he followed him through the thick fog, across the lifeless, boulder-strewn land. Only a few feet away, his master was a grey silhouette, looking the part of the true holy warrior now, the Knight Inquisitor, treading carefully, tense, turning from side to side. He held the eru stake like a sword. To Kadmion, Olteras had never seemed more formidable than he did then, more inhuman, like a stalking shadow of death. At the same time he, Kadmion, less and less understood what they were doing here and why. He felt once more the intense longing for what he had glimpsed in his vision, and, more especially, for what he had not seen, for what remained just beyond the range of his perception.

Then he considered that these thoughts were sent to him by the Shadow Titan. They were the Titan's temptations, his snares.

84 AMAZING

He ran after Oineras, afraid, struggling to keep up. The Knight Inquisitor seemed to glide over the rocky ground, while he stumbled, bruised his shins, fell, got up, hurried on.

Oineras turned to him once, still grey, almost featureless in the fog, remote from all things solid and warm and breathing and real.

"Do not be afraid," he whispered in a voice like the wind between the stones, "Think on the Nine Gods and be comforted."

But he was not comforted, Still he hurried after his master. The only sounds were his own sounds, his breathing, the pebbles rattling at his footsteps. Oineras was a wisp of fog shaped like a man.

Then, very suddenly, but very subtly, his master was gone. He could no more define his disappearance than he could remember the instant of a ran-

dom eyeblink. He was simply aware that he was alone.

He stopped walking. He didn't know what to do. Somehow, he didn't want to start shouting. The silence was a fearful thing, but the prospect of noise was worse, as if the fog were a living, sleeping monster all around him. which he did not want to awaken.

He merely sat down and waited, confused, afraid. If Oineras needed him, he would come for him. If not, he would wait until the Titan had been defeated elsewhere. He, Kadmion, didn't necessarily have to have any part in it. As an apprentice to the Knight Inquisitor, he knew he should, but just now he didn't think he would ever hold such an office

Why? he asked himself. Why? He didn't know, about anything. He had just become the apprentice of Oineras somehow. His parents handed him over when he was too young to understand. He had just grown into the role.

It was the only one he knew. He was his master's apprentice.

"Kadmion," came a voice, quite near at hand. It was utterly expressionless, like something partially apprehended in a dream, rather than heard.

He looked up and saw someone standing before him, veiled in fog, clad in

a white robe with a hood, wearing a golden mask.

He got up, and ran to the other. "Master?"

The other did not speak. He merely removed his mask, turning it sideways, out from his face as if he were opening a door.

For the merest instant, he saw the wild, terrible face of the Shadow Titan. Then there was a void, not merely an empty hood, but an infinite darkness. "Look, and wonder."

The darkness flowed out of the hood like heavy smoke, settling on the ground, spreading, until it stretched as far as Kadmion could see in three directions. Only behind him was there still uncovered ground.

The stranger collapsed into the heap of an empty robe, and the robe was gone, covered over.

Kadmion was standing on a cliff. The darkness became the night sky, filled with stars. The world merely ended a few feet from where he stood

85

Then the revelation came to him, and he understood that the night sky was not the night sky, and the stars were not stars. He perceived the great Dream directly beneath the thin fabric of the world. He saw it as no one had ever seen it before, as a void from which men awaken into life with indescribable loss and mourning, to which they return, bewildered, afraid when finally unburdened of the flesh, having forgotten nearly all concerning that primal, blissful state.

It was all of these things, and more, and at times none of them. Kadmion's mind could not grasp, nor could words express the magnitude of the great Dream.

It was clearly the Dream of Gods, of Titans, and not that of a fourteenyear-old boy who followed his master because he didn't know anything else to do. He was lost in it, obliterated, like a raindrop fallen into the raging sea.

But, clinging to one shred of consciousness, he understood clearly one thing; that he had no understanding, only vision. And he knew that his master had understanding, but lacked vision, any capacity to dream at all. That was the tragedy of the two of them. If they could have become one, if -He saw all the world, and the spaces between the worlds, and he saw the

things which repose in the memories of the Gods, both of the Nine and of others -

He was like one born blind, in the company of the blind, so that sight is unknown, inexpressible. Suddenly he could see —

"Kadmion! Young fool! What are you doing?"

- and was made blind again, darkness crashing -

Oineras held him by the shoulders. He screamed and struggled. He wept,

The Dream was gone, like a picture in a glass window, smashed. There was only fog all around, the barren landscape, the cold air, the Knight Inquisitor holding him, looming over him.

He went limp, but Oineras held him up, and turned him to face the direction in which he had been staring. There was no cliff edge there now, no starry abyss, only the grey, rocky ground vanishing into a fog a short way off.

"Titan!" his master shouted. His voice echoed back through the fog: "Titan-an-an . . ."

"Titan! Leave the boy alone! Come to me! Show me what you showed him."

"I, Vedatis, am here. Let go of me," the boy said.

The voice was like thunder. Oineras, startled, let go.

It wasn't Kadmion. The figure grew taller as Oineras watched, towering over him. Then it removed its mask, turning it to one side like an opening door.

There was only darkness, utter and absolute, without any memory of a transition into it.

The youth Oineras sat in the dark cell, deep inside the holy mountain, trembling with anticipation, with holy dread. For all the place was damp and cold, for all the earthen walls felt like ice, he was drenched with sweat. His heart raced.

It was his time of manhood. With ancient ritual, the priests of the town had led him, and all the young men and women, down the long tunnel to hide them from the sky and from spirits of the waking world, so that, on this night or succession of nights, the Gods would touch each of them, and bring them into adulthood, and, through dreams, give direction to their lives. It was one of the three great passages. He had been told this often. The other two were birth and death.

Oineras sat. He waited. He lost all sense of time. It seemed but an hour had passed when he began to hunger, when his tongue was swollen for want of drink. He stood up to lick the moisture from the ceiling, but gagged and fell down, fainting. Later, he awoke in the darkness, stiff and cold, with no memory of having dreamed. All the while he did not cry out. His voice would shatter his dreams before they came to him.

He remained silent. Again he fainted, or slept, and again awoke, without any memory of having dreamed. The Gods did not reveal themselves.

Then the thought came to him: was all of this his dream, this very lack of dreaming?

And he sat, attentive and still, trying to discern the meaning of this dream. Nothing happened. He became sick from the foul water, and vomited and emptied his bowels. He woke and slept so many times that he could not remember how many.

Nothing happened.

At last, there was a footstep. He opened his eyes, and saw a light floating in the darkness, some ways off. It was no different than the many ghost-images his blind eyes had seen.

Then, it was different. He closed his eyes, and it was gone. He opened them, and it was there again, burning steadily, coming closer.

The light illuminated the face of an old crone. She held a taper. Her face was painted with broad, alternating black and white stripes, as he knew a face to be painted when one has to deal with the unclean.

She looked on him with distaste.
"You still here? You're the only one, I knew it would be you. It figures."

She prodded him with a stick. He lurched to his feet, reaching to her for support. She stepped back. He fell in the mud. Later, when he was stronger, he got up and followed her out of the holy

mountain, into blinding daylight.

The priests and elders of the town were waiting for him.

"I have brought the *unvati*," the woman said. She threw down her taper and hurried away, leaning on the stick. *Unvati*. He knew what that meant, Unseeing one, Failed one, One to

The Last of the Shadow Titans

whom the Gods will not speak. One who cannot dream.

The elders and the priests turned from him. Everyone he met in the streets somehow knew that he was unvati and hid their faces as he went by.

Weeping, he ran from the town. Then his sorrow became anger, He marched across the world. Time sped up for him, day and night passing like the flapping of black and white curtains in a breeze. He crossed many lands. He came to the hall of the Knights Inquisitor and became the greatest, the most zealous among them. He learned that those who had called him unvati were foul heretics, ones who had strayed far from the purity and light, from the true and only way revealed by the Nine Gods.

He traveled over the world, seeking the last of the Shadow Titans. He acquired an apprentice, Kadmion. Together they went, at last, to the island which was not an island, which was the head of the huge body of Vedatis, the Titan of Dreams.

He stood, in the fog, holding the boy Kadmion by the shoulders. Then Kadmion was not Kadmion, but Vedatis. He turned, towering over Oineras.

"Behold," said the Titan. "The Dream is revealed to you at last. Here it is. All of it."

Vedatis swung aside his mask. He had no face.

Then he was gone. There was only darkness. Oineras saw nothing. But he understood. At least he had understanding.

He wept.

Kadmion perceived the rest of the adventure but dimly.

For a few minutes, he stood beside his master in the fog. Then the sun rose, and the fog melted away. Oineras was still beside him, his mask gone. Sunlight touched a mountain top. Kadmion looked up, pointed, and shouted, tugging on the Knight Inquisitor's arm, Light and shadow shifted over the mountain, and the color of stone and sand formed the face of an old

man, staring down at them, the face of the Titan Vedatis.

The Titan sighed and a wind roared over the island. Opposite this mountain was another. On it, the sunlight and the with-

drawing fog revealed a huge golden mask. These mountains were the two he and Oineras had passed between when they arrived. Now both of them were alive, the enormous mask glaring,

hateful, the old man's face merely tired and sad.

Kadmion had the impression of a struggle. His eyes couldn't follow it all. Oineras loomed high as the mountains, shouting with wrath until the ground shook and avalanches came thundering down. Kadmion screamed an unheard warning when the mask on the mountainside opened its mouth and spewed out a river of fire. He felt the heat as it filled the valley. He fell down and covered his face, writhing to avoid the flames that somehow never touched him

With a crash, with thunder, with the trembling of the world and the voice

of the flames, fire and stone met and broke over Oineras, over Kadmion too, like the tide over a post stuck in the sand. Very, very faintly, more like the impression of a dream than anything actually seen. Kadmion was aware of Oineras standing in the midst of the fire, wrestling with the unleashed figure of the Titan, who had broken free of the mountain that held him. The Knight Inquisitor had become a giant, as huge as the Titan. He held aloft the eru stake, and the fire recoiled from him.

Kadmion, coughing, his eyes stung by the smoke, pummeled with raining stones and ash, watched what he could. Soon the enormous figures were hidden from view, and he saw only dark clouds moving before one another, lightning flickering among them.

The boy stood up and ran away a short distance.

Then he looked back. The clouds of smoke parted, and quite distinctly he saw the face of the Titan, again on the mountainside. He saw it come loose, like a tent cut from its supports, sliding down the cliff, rippling over the stones.

Much later, as the air began to clear, Kadmion walked through the smoking valley. He called out his master's name. "Over here, boy."

The voice was weak, Kadmion turned toward it. He found his master standing over the face of the Titan, which lay crumpled like a fallen tent. The hot stones burned through the flesh. In a place where it had burned away completely lay the Titan himself, faceless, his body shriveled and blackened and raw, embedded in stone like one lying in shallow water. He was still huge, at least fifteen feet from the crown of his head to where his thighs merged with the earth.

Vedatis was still alive. He twitched feebly. Kadmion felt a stirring in his mind. A faint memory of the Dream came to him.

Oineras walked across the face of the Titan. He was breathing hard, stag-

gering. Kadmion thought his master would faint.

But he did not. Sheer determination drove him. The Knight Inquisitor stood over the Titan, legs astride his neck. He held the eru stake high, then drove it through one of the bloody eye sockets, deep into the skull.

Vedatis the Shadow Titan, at the very last, beheld the Death which had come for him from beyond the worlds, which had settled into the form of Oineras the Knight Inquisitor. He saw it in the conventional form of death, which he had revealed to men in their dreams countless times: a skull-faced spectre, standing astride him, towering high, a stake of eru wood upraised. The skull-face became a tarnished golden mask, then a human face, sootstained, sweaty, wild-eved, hate-filled. He reached out one last time into the mind of Oineras, found madness,

opened the madness like a door, and touched the innermost region of that The Last of the Shadow Titans

mind with the memory of the great Dream.

Then he only sought to escape from pain, to submerge himself in his past. He looked to one side, into the future. There was only darkness. He looked to the other, into the past, and saw his long and glorious life.

Kadmion felt the Dream die. Oineras, for the first time, also felt it.

Kadmion fainted, Oineras screamed,

Much later, when Kadmion awoke, Oineras said, "Now we must convert those we have liberated to the true worship of the Nine Gods." He said it with such hollowness that Kadmion did not even ask him if he believed what he was saying.

Later still, as they walked across the island beneath a clear sky, Kadmion said, "I understand now why he fought. He knew his end had come, and there was nothing he could do about it. But he wanted to survive just long enough to make us understand. To make us remember him."

"And the great Dream," said Oineras. "He wanted us to remember that."

"Yes. That's it."

Even as they walked, both of them felt the remaining echo of the Dream, like a fading shout in a cave.

The inn was partially standing. All the surrounding houses had been shaken down.

Oiners and Kadmion entered. The twenty masked ones were seated by the hearth, which was filled with ashes.

"He is dead," said one of the many.

"He is dead," said the Knight Inquisitor dully, "You are free now,"

"We are not free," said one. "Nor are you. Nor shall you ever be."

They took their masks off and became individuals, old men and women, youths and maidens, one boy about Kadmion's age, all of them pale with memory, wide-eyed with the echo of the Dream.

Kadmion realized that he was still wearing his mask. He took it off. He wondered if his face, too, was transfigured.

The face of Oineras reminded him of the one on the mountain, old and tired and sad.

"We," said one of the women weakly, "were those special people who felt the Wonder most strongly. All of us were outcasts, for the people around us were afraid of this thing we felt so intensely, and in the end, each came in his own way to Vedatis, who was beloved of us all. Now that he is gone, we are nothing."

"Then I have won," said Oineras, once more without any conviction. "The Gods will destroy you."

Once more Kadmion did not have to ask his master if he believed what he was saving.

"Let them try," said the woman. "We are filled with the memory of the

Dream, and the Dream touches even the minds of the Gods."

"We shall haunt the gods," said a young man. "And we," said Kadmion, gently taking his master by the hand and lead-

ing him toward the door, "are filled with the memory of the Dream also. We shall haunt the world" There was a broken piece of the mirror on the floor. Kadmion passed it on

the way out. He saw his reflection.

His face was transfigured with light.



MEMO TO AN ASTEROID MINER

Draw out my rocky bones: the gleam (of iron, gold, uranium - it does not matter)

draws you to my side -

magnetic

hands pierce my flesh

remove piece by piece

my heart and soul draw closed

like the strings of your purse

the facets of my eyes.

Soon I will thrive again around you

a phoenix reborn

from the ashes of your blast-furnace

to surround you: warmth

trapped by my bulkheads fueled by my radio-active core

or pulsing in the diodes of your new

electric heart.

Always listening to both our beats,

- John Gregory Betancourt Memo to an Asteroid Miner

MENTAL BLOCKS by Steven Gould art: Hank Jankus

Steven Gould has been selling science fiction since 1979. He lives in Bryan, Texas, where he works for and attends Texas A&M University as well as doing freelance word processing, library research, and writing. He also claims to be 28, single, an expert practitioner of sloth, and the proud possessor of red hair and "füzzy, green teeth." We are not sure we believe him on all these points.

Timothy was throwing grenades out the car window.

It was serious business. First, he'd reach into the imaginary bucket between his feet and pull his hand out clenched around an invisible object. He'd heft it — getting the feel and weight of it. Then, as the car sped closer to yet another gully or stream, he'd insert the fingers of his other hand through the pin's ring and pull sharply. Then he'd toes the grenade out the window, just short of the stream, etc., allowing for the car's forward speed to put the explosive where he wanted it. His lips would move as he counted, then he'd jerk and bounce in the seat from the force of the explosion.

"Why don't you roll down the window first?" I asked, to see what he'd say. In the car it was late September or early October — cool air conditioned

comfort. Outside it was August and the temperature excessive.

"What window?" Timothy asked.

I shrugged. Timothy had been throwing grenades out the window for the last two hours.

We were on our way back to the University after a weekend at the beach. Timothy had offered to drive, but I had declined his offer. I like to drive on long trips. It keeps me from being bored. Also, Timothy drives like a maniac.

Beside me Timothy tensed, cocked his arm, and another bridge bit the big one. I shrugged. Graduate students are not known for their adherence to sane behavior. Graduate students in psychology, like Timothy, are even worse.

Of course, I'm also a graduate student in psychology, but I don't throw imaginary bombs out the windows of speeding cars.

I glanced over at Timothy. He was staring seriously ahead, his brow wrinkled in thought. We topped a hill and there was a bridge below. Timothy scooped another invisible grenade out of the invisible bucket, pulled the pin, and waited, hand uplifted. The bridge rushed closer. His arm tensed, swung back.

Timothy dropped the grenade in the car.



Mental Blocks

"Sonofabitch!" I screamed, groping madly for the

I sat very still — straightened the car slightly on the road.

Timothy was rolling on the floor, laughing his fool head off, "You jumped! You actually jumped!"

My ears started to burn, and in the rear view mirror I could see the flush creep up my face.

"Jackass," I said softly. Then the humor of the situation hit me, and I laughed with him, "Well planted, Very well planted,"

Timothy is probably my best friend. He has the sort of warm and sympathetic personality that soothes open wounds like iodine and salt. Few people saw beneath the caustic brilliance to what lay within - pure malevolence. None the less. Timothy is dear to me.

Maybe it's something like the pleasures gained from rock climbing or demolition derby - a certain element of risk, and besides - it feels so good

when you stop.

Timothy had stopped laughing, except for a simpleton giggle every few moments. He was staring straight ahead, and a smile was slowly growing on his face. It was the type of smile that makes parents hustle their children off the streets and young women clutch their purses tightly and walk faster. It was a smile like the one he'd had before the Montgomery incident.

Dr. Chester Montgomery taught Psych, 605, the graduate course in Behavior Modification. He was an ass and a rabid proponent of anti-Skinner behavior theories. Early in the course, he'd given the twelve of us in the class the guidelines for our term project; design and document an experiment utilizing behavior modification techniques. Timothy's was unique.

He contacted the rest of his classmates (myself among them) and secured our cooperation. Simply put, he requested us to visibly pay more attention to Dr. Montgomery in lecture the higher his hands were placed. When his hands hung at his sides, we were to doodle, stare off into space, yawn, and seem on the edge of going to sleep. As his hands rose higher, we would perk up, take careful notes, and laugh at his slightest joke.

By the end of the eighth week, he was lecturing with his fingers linked across the back of his head constantly.

Word had gotten around. On the day of Timothy's class presentation, there were seven other graduate students, three other professors, and the head of the Psychology Department sitting in.

Timothy had documented the study with slides, showing the progress of Dr. Montgomery's hand elevation with respect to time and classroom reaction.

Luckily, with the witnesses, Dr. Montgomery couldn't flunk him. The study met all the criteria he'd specified, even if it did prove to be personally embarrassing.

This, or worse, is the sort of thing you can expect when Timothy starts smiling like that.

"Don't even think about it," I said.

Timothy looked at me surprised. "What?"

"Whatever you're thinking about. I know that expression."

The University exit came up; and I took it, edging across the access road to make a right.

Timothy grinned and stuck out his tongue. "Oh, no. You're going to want to be in on this. We're talking dissertation material."

I winced, "That doesn't indicate the respectability of what you have in mind - only the magnitude."

"Hey!" Timothy did his best to look wounded. It wasn't very convincing because that smile kept coming back.

"Hmpphh."

"Just listen. Do I refuse to listen to your ideas?" "None of my ideas ever got us thrown in jail."

"Hey, how was I to know she was under age? They didn't press charges and we got an A."

"My parents were not amused."

"Just listen to me. You don't have to do anything if you don't want to!" I sat there for a second, amused at the whole exchange. It was how most of Timothy's projects got started; and, for all my protests, I wouldn't miss one for the world. Just as I wouldn't give up the privilege of bitching about it later.

"Okay," I said after an appropriate pause. "Tell me about it."

He smiled again; and, despite myself, I smiled with him.

"Tell me what happened just now, with the grenades?" I had already been thinking about that. "Call it projective fantasy. For two hours you've been consistently acting as if a certain set of conditions existed, when in fact they don't. Consistency is the key word. Despite an intellectual, conscious knowledge that you were going through utterly meaningless hand motions, enough of your fantasy soaked into me that my instinctual reaction was to scramble for your invisible grenade. It makes me wonder about what discriminations the subconscious can make between fantasy and reality."

"That's what I see, too - a person who follows his own set of rules so faithfully that, despite reason and common sense, those around him start following the same set of rules."

I grinned. "We see it all the time - it's called religion."

"Now who's trying to get us into trouble? What I want to examine is what happens when we up the scale? Here's what we're going to do. . . ."

Academic Plaza is a square of pavement and grass in the center of the campus. On one side is the Slab (short for ClasS room LABoratory building) and on the other is Bolton Hall. The other sides are bordered by Administration, the John Dewey Library, and the Registrar and Records Complex. A statue of a nameless pioneer sits in the middle of the Plaza, bordered by flowers. He holds a muzzle-loading rifle across his waist, horizontal to the ground. The rifle muzzle and stock are a very popular perch for pigeons. On Monday morning, September third, the first day of the fall semester, the pigeons, the statue, and the students saw insanity organized.

It had taken days, but Timothy had cleared it with Administration, Maintenance, Campus Police, the University Council on Human Experimentation, Department of Military Science, Department of Civil Engineering, and the Psychology Department. We drove up in a University Maintenance

truck and began the farce.

There were twelve of us. We were clad in Maintenance coveralls with the University seal over the pocket; we were perched on the large flatbed as it picked its careful way through the crowded plaza. Timothy kept tapping the horn lightly to get the students out of our way. This was the typical obnoxiousness you could expect from University Maintenance.

Timothy shut the truck off. We jumped down and went to work. While some of us set up a rope-and-post barricade, Timothy and I checked out the

line painter we'd brought with us.

The barricade enclosed a rectangular area fifteen meters long and three meters wide. It stretched across the plaza from just short of the pioneer statue to just short of the grass on the other side. This blocked most of the traffic from Slab to Bolton Hall, causing it to go around either end of the barricade.

The line painter was one of those portable units used to mark the lines on pavement in parking lots. Timothy and I loaded a half gallon of red paint in it and went to work. When we were done, we had two long rectangles painted on the concrete (we'd already agreed to sandblast this off at the end of the experiment). The rectangles were seven meters long and one-third of a meter wide. There was a two-meter gap between them. We put the paint unit back on the truck and started setting up the signs.

They said:

STEALTH TECHNOLOGY FIELD TEST SITE

Department of Civil Engineering Department of Military Science Department of University Maintenance

The truck left and returned shortly with a load of "blocks."

That is, the truck returned empty, with the exception of four of our people standing on the back with their hands held out palms down, as if they were resting them on something. As soon as the truck stopped, the rest of us formed a line stretching from the empty truck to the lines painted on the concrete. Timothy put on knee pads and knel on the concrete with an empty

bucket and a masonry trowel in his hand. Then we started passing blocks.

Human conveyor belt — one brick at a time. Two of the guys on the truck

Human conveyor belt — one brick at a time. Two of the guys on the truck would lower a brick, pretending that it was about the size of a standard cinder block, and the line would pass it down to Timothy. Timothy would apply imaginary mortar to the pavement and let me guide the brick down. Then he'd repeat the process, adding mortar to the space between the blocks.

We were good. We'd practiced. Most of us hadn't shawed in two weeks. You took a brick from the next guy in line and sank down from the weight of it, grunted from the effort, and passed it on. We sweated, took breaks, told jokes, and goofed off — just like normal University Maintenance. And we got quite an audience.

Soon, the Pioneer Press, the campus newspaper, had a reporter and photographer out there, watching sixteen grown men building an imaginary wall. The reporter, a woman dressed in a tweed suit, ducked under the barricade and came forward. I had been doing the troweling for a while and Timothy saw her first.

"Hey, lady! Get back! The University can't afford to be responsible for non-employees behind . . .!" He took a step toward her — and tripped over the wall.

He did beautifully, acting like he'd run into blocks at shin height. "Shit!" He landed flat on his stomach, actually absorbing the impact with his arms, but not obviously. Two of us hustled the reporter back across the barricade while I tended to Timothy. I got him over to the truck and sitting on the edge. We made a big show of examining his shin, while blocking everybody's view.

The reporter came timidly up, totally unsure of what was going on. I heard her ask one of the guys, "Just what are you men doing here?"

heard her ask one of the guys, "Just what are you men doing here?"

"Lady, I just do my job. You gotta talk to our supervisor if you want infor-

mation. We were told not to talk to nobody."

Timothy allowed himself a quick, unseen grin. Then, limping, he went back to the wall: and work resumed.

We finished the wall in mid afternoon; packed up the trowels, stepladders, and barricade; and drove away. The paint that marked the 'wall' was dry and clearly visible. At the gap in the middle, we added another sign on both sides:

LOW HEAD CLEARANCE

5 FEET 6 INCHES
1 METER 67 CENTIMETERS

Timothy and I were off the truck the minute it went around the corner. We drove into the back entrance to Bolton Hall and scrambled up the stairs

to where they put the psychology grad student cubicles. Mine overlooked the Plaza. An electric razor and changes in clothing awaited us. We looked out the window as we shaved and changed

Our ringers were the first ones to the wall.

On a campus with 22,000 students we had 100 ringers. That was one ringer for every 200 students — hardly a significant number. But — our ringers were over two-thirds of the people in the Plaza, and they'd been instructed well.

The first one came running out of Slab toward Bolton Hall at a moderate trot. He ran full into the wall, bounced back, and crumbled. Other ringers moved forward with hands extended, stopped at the wall, and moved sideways. Several ringers were ducking through the "gate" and continuing on to class. One short girl wearing a cowboy hat walked through without ducking. Her head jerked back, and the hat fell to the ground. A taller boy walked through without ducking. His head jerked back and he staggered, clutching at his forehead.

Of course there were students who ignored the whole process and just walked across the painted lines without a second glance, but a large number of the non-ringers followed the lead of the ringers, soing around the wall or

ducking through the "gate."

The reporter from the *Pioneer Press* came back with her photographer and walked around the wall, through the "gate," and — finally — through the wall. Be started taking spot interviews from the crowd. As planned, she ended up speaking mostly to ringers. As we watched, her expression went from amusement to frustrated disbelief. She even tried to drag a couple of our ringers through the "gate."

By evening, 90 percent of the traffic was going around the wall or through the gate. Of those who went through the gate, 85 percent were ducking to

avoid the low ceiling.

"Here." A paper flew through the air, slapped into my chest, and fell into my lap. I looked up. Timothy was reading a copy of the *Pioneer Press*. I did likewise.

They played it for humor, claiming lack of confirmation from the departments involved as proof that the project was classified. Concurrent with pictures showing the construction and the students walking through the "gate," they showed students walking through the walls. In explanation, they said that the students who walked through the walls were obviously using classified devices that vibrated their molecules through those of the wall

Timothy had been down at the plaza all morning.

"What's it like down at the wall?"

He grinned. "Wall crashers are down to 5 percent. I cut the ringers back to four."

I blinked. "What do you think is going on? That doesn't jibe with the predictions."

"I don't know. Maybe we got a tradition going, like don't walk on the grass. We'll have to see how it goes."

"Hmpphh," I said.

By the end of the week, two things had happened. Wall crashers were down to 2 percent and someone was taking offense at the "existence" of the wall.

The someone was Joe Bob Williams, president of Campus Crusade for Moral Life. He wrote letters to the *Pioneer Press* berating this "cultish" phenomenon that was obviously the work of some communist plot spread by something in the campus water supply, probably fluorine. He put a plastic milk carno rate down within the painted lines of the "wall" and started berating the students pouring through the gate. Timothy and I were there when he started preaching.

"Why is nobody listening to him?"

"Huh?" I'd been too busy trying to analyze his brand of pseudo-evangelical nonsense to notice. I looked. Maybe one person other than ourselves, out of several hundred in the plaza, was paying any attention to Joe Bob. "I'd don't know. Maybe because he's standing inside the wall. How can they see and hear him if he's inside the wall?" I laughed.

Timothy looked thoughtful.

He walked over to where Joe Bob was still screeching. Joe Bob stopped his sermon and listened to what Timothy said. He scratched his head and scowled. Timothy shrugged and walked back to me.

Joe Bob pointed at one of the students walking parallel to the wall, toward the gate. "You! In the red shirt! Why do you persist in this satanic delusion?"

The student, only two meters away from Joe Bob, walked on, oblivious to the noise. Joe Bob scratched his head again, stepped down off the crate, and dragged it out of the painted lines, away from the wall. Then he stepped warily back up on the crate and faced the students on that side of the wall.

Before he'd said anything, people stopped and looked at him expectantly. He looked back at the wall, then back out at the crowd which was growing larger as he stood there.

Ābruptly, he stepped down off the crate and walked off through the crowd, looking over his shoulder twice with a nervous, haunted expression. His crate lay where he left it, under the watchful eye of the statue and the pigeons.

"The quack shack has another one."

Timothy stared at me. "No."

"Yes." I threw down my clip board. "That's the sixth reported head injury attributed to the wall in three days. This last "psychosomatic

wound" was treated with six stitches."

"What's with them? Obviously, they're hitting their heads someplace else and saving it happened at the wall. Did you interview any of them?"

"The last three. They all say it happened in the gate. All of them are tall enough to hit the supposed height of the arch if they didn't duck. I couldn't

get any of them to change their story."

Timothy shook his head. "Wall crashing is down to two-tenths of a percent. We stopped using ringers two weeks ago. There's another letter in the Pioneer Press from Joe Bob Williams calling for the destruction of the wall on moral grounds." He grinned, but it wasn't the old Timothy grin that I knew and feared. It lacked his old confidence. "The coming weeks should be interestine."

I took a deep breath, "I think we should quit now."

"Oh, yeah? What about our data?"

"We have enough data. In fact, we're running out of video tapes for the monitors." I scratched my head. "Besides, the people over at the quack shack are getting angry about this uncorrected hazard we're maintaining." Timothy rolled his eyes. "Good grief! This is getting ridiculous. All

right. Let's go borrow the sand blaster from maintenance."

We had the plaza sandblasted clean of red paint by three in the afternoon. All the signs were consigned to the dumpsters. With relief, we both went home to get the grit showered out of our respective nooks and crannies.

I had dinner with a young lady friend and went to bed early. I deserved a

The phone rang at midnight. It was the campus police.

"I'll be there immediately." I told them.

Timothy beat me by five minutes. I found him standing in the grass at the edge of the plaza watching the ambulance crew helping someone out of a car. The lights from the police car turned him red. blue, red. blue.

"Who is it?" I asked.

"Ioe Bob Williams," He stared at the wall, "I don't believe it."

I was having trouble coping myself, Joe Bob's car, a 1977 Impala, was sitting out in the middle of the plaza, away from everything. Its front end was flattened. Headlight and windshield glass lay scattered in puddles of radiator fluid. Oddly enough, the smashed front end of the car lined up with the old borders of the wall.

"Is he okay?"

Timothy shrugged. "Facial lacerations. Maybe a broken rib or two. The doors jammed. They had to wait for a power jack to get him out."

"Oh. I wonder what he ran into before he drove the car here? It's a wonder the car made it this far, even if he just had the accident around the corner."

Timothy looked at me oddly, then glanced back at the broken glass scat-

tered across the concrete. "Serves him right. Nobody should go driving across the middle of campus at forty miles an hour. He could have killed somebody." There wasn't much enthusiasm in his condemnation.

"True."

"We'll get rid of the wall properly, tomorrow."

Call it a repeat scene. The statue and pigeons had seen it before. Twelve guys in University Maintenance coveralls arriving in the middle of campus on a maintenance truck. We set up barricades all around the edge of the plaza, much farther away than before.

Crowds gathered. We ignored them.

On one edge, conspicuous by the bandages on his face and the sling on his arm, was Joe Bob Williams. What little I could see of his face looked confused. We ignored him.

Timothy brought out a spool of wire and began stringing it from where the truck stood on one side of the plaza to the wall. I followed him with a wooden box cradled carefully in my arms. My steps were deliberate and careful. The box was labeled: DANGER — EXPLOSIVES: KEEP FROM HEAT, FIRE. AND SHOCK.

Timothy had started splicing wires by the time I reached the wall. I set the box down carefully, then wiped my hands on the sides of my coveralls. The rest of the crew was busy setting up signs all around the perimeter of the barricade. They read:

DANGER: BLASTING IN PROGRESS KEEP WELL AWAY

I reached in the box and came out with my hands curled around an invisible brick of plastic explosive. With elaborate pantomime, I moulded it to the base of the wall. I repeated the process at five other locations. Behind me, Timothy was running the wires to each of the spots I'd left the EXPLOSIVES. I carried the box carelessly back to the truck and threw it in the bed. Timothy finished his wiring and came trotting back. I took the detonator out of the cab of the truck.

"Ready?"

I grinned. "Ready."

Timothy hooked the wires to the terminals, then looked at the crew. "Fire in the hole!"

"Fire in the hole," repeated each of the men stationed at each edge of the barricade. The remaining crew hid behind the truck.

I looked at Timothy. He nodded slowly and brought his hands down, plunging the detonator down. I dropped flat on the grass, followed immediately by Timothy. I twitched, shook. I could see Timothy doing the same. I imagined rubble raining down about us. We got up slowly, brushing our

selves off.

The crew moved forward and started loading invisible debris onto the truck. I smiled and walked over toward Timothy. Halfway there my right big toe slammed into an immovable object.

"Shit!" I said as I fell forward. I broke the fall with my arms and immediately curled into a ball, my hands gripping the injured toe. It felt broken — sprained at the least. After half a minute, I twisted my head around to see what I'd tripped over.

There was nothing there.

63

LOOK AT IT THIS WAY

"Just the place for a Baker," the Snark exclaimed, Surveying the mountainous land; "O succulent stoutness and flavour so famed When basted in cider and sand!"

"Just the place for a Baker! My spirits are high; I repeat the euphonious phrase — Just the place for a Baker! on whom my glad eye May bestow an affectionate gaze."

Its kit was complete; there were muffs for its feet And bathing-machines by the score, With a series of volumes whose erudite columns Dilated on Criminal Lore.

It scented its food on a ship that pursued A retrograde nautical course: O'er the sibilant swell came the clang of a bell That commanded the crewmen in Morse.

"One views without qualms their conventional arms," Said the Snark, with a glass to its eye: "While adventurers nimble who trust to a thimble Are . . . exceedingly welcome to try"

- David Langford

Screen Reviews

by Baird Searles

The odd contrast, this issue - two classic SF novels made into films. One is a biggie, long-awaited and highly publicized, which reportedly opened at 1700 theaters simultaneously worldwide. The other crept into town on an obscure cable channel and was seen, so far as I know, by nobody. Which is the hetter movie? Read on and see. (There's yet another novel-to-film which begs the issue by being from a book too recent to be considered a classic, and which, furthermore, was written with the screen in mind.)

WELL DLINE

Dune is an absolutely God-awful movie.

I loved it

I'm tempted to leave the review at that, and move on (the spirit of revolt sometimes rises in the reviewer's breast), but I suppose I owe you an explanation.

It's really very simple. A movie should be judged on its own. If it's incomprehensible (to the ordinary literate person) without some outside reference, something's very wrong,

So if a movie based on a novel doesn't make any sense unless vou've read the novel, then it's a flop as a movie.

I must say I got some chuckles out of the utter bafflement with which the mainstream critics greeted Dune. The notice in the most prestigious of New York's papers started (to paraphrase) by saving that several of the characters in the film were psychic, which may

have helped them to understand it. The problem is not exactly unique to science fiction, but SF novels translated to film are certainly prone to this sort of thing. Why? Because SF is a literature of ideas, and ideas are primarily communicated by . . . you got it. Words. And Dune is the epitomal example of a novel chockablock with complicated ideas and concepts, on which its plot (which is fundamentally simple) is dependent.

The book could take all the wordage it wanted to explain things; a movie can't stop to communicate the necessary knowledge for it all to make sense. such as what melange has to do with interstellar navigation, or the complex ecology of the planet Arrakis; who all those witchy ladies named Benny are, or even why Jessica is only a concubine and not the royal consort.

It's the background of concepts such as these - need I add skillfully done background - that makes a great SF work believable. And when it gets slung on the screen, there's no time for it, particularly when it's as dense with ideas as Dune. What one ends up with is Great Moments From The Book illustrated by the motion picture.

So one really has to write two reviews. The one for those who

haven't read Dune is simple: Forget it.

The one for those who have read Dune is more complicated, but boils down to: Wow! They've done a great job illustrating the Great Moments of Dune

In all fairness, it should be noted that there has been some effort to get across as much information as possible. This may do more harm than good. There is sporadic narration by the Padishah Princess Irulan, who really appears only at the end of the movie; the uninitiated might keep expecting a Princess Leia to appear out of the woodwork. There are voiceunders to reveal the characters' thoughts - one reviewer couldn't understand why the actors kept whispering.

And I can remember only a couple of scenes that last more than 30 seconds. Thus a lot of ground is covered, but it tends to become a bewildering hodgepodge of people doing incomprehensible things in incomprehensible places. Even the dedicated aficionado

might well get lost. But somehow it doesn't matter. The production is so magnificent, so evocative that if you have a clue as to what is going on, it is a joy simply to sit back and watch the ravishing images unfold. (Dune makes an interesting contrast visually to Star Wars. The latter was all bright, clear, hard-edged; even the famous cantina scene had a healthy clarity. Dune is dark, baroque, convoluted. The desert scenes and those in the Padishah Court, which one would expect to be brilliant, have a somber and claustrophobic feeling to them.)

I don't gasp easy any more. (Actually, I don't gasp at all - does anyone really gasp these days? My equivalent is a low chuckle of pleasure on seeing something splendidly surprising.) But I reacted audibly to several scenes, to the surprise of my companion. One image that will stay in my mind a long time is that of the (relatively) tiny space vessels entering the giant portal of the interstellar ship, a great door 104

framed in gold. Another was the gathering of the worms - the first time we have seen several together; it is extraordinary. The giant worms are beautifully realized throughout, but the several appearances of single ones have only been a preparation for this scene.

One could rattle on at length, not just about the big set scenes and the special effects, but "smaller," subtler aspects of the film such as the costumes. But what's the use? Dune's greatness lies in its visual artistry, always the most frustrating thing for a reviewer to have to communicate in mere words.

However, tribute must be paid to the actors, an imposing array of non-stellar talents; they are not big names; but there are several familiar faces from British TV series who have proved that acting is still an art, and at least one American who is a formidable presence. There is the beautiful Francesca Annis as the Lady Jessica and the alarming Sian Phillips as the most prominent of the Bene Gesserit "witches" and the tiny Linda Hunt as the littlest Bene Gesserit. Kyle Maclachlan as Paul is perhaps unconvincing as a mid-adolescent, but soon gets into stride and brings the maybe too-heroic hero to life authoritatively. The major fault with the production

is the music, which is totally unmemorable and totally unhelpful. One longs for a score that matches in sound what one is seeing.

So. Was the movie of Dune worth waiting for all these long years? I think those that were waiting for it were those who know the book. They should be well satisfied.

2010 AIN'T 1968

There is no explaining the impact of 2001: A Space Odvssey to anyone who

wasn't there in 1968. It totally changed how we looked at things; and I'm not just talking about the sciencefiction community, but the culture as a whole. Its influence has been pervasive - in film, commercials, and visuals of all sorts. The film's hair-raising originality simply cannot be communicated to a generation raised under that influence. Above and beyond that for the SF community, it showed us things we had only read about before - no film until then had ever visualized space travel so completely, so accurately.

What divided the SF community at the time was 2001's ambiguity. The old guard at the time was used to SF that was clear, coherent, and unambiguous; this movie was hardly that, Its extraordinary qualities were mystery and poetry; these were qualities not found in SF in any great quantity. What was so wonderful (wonder-full) about 2001 was what was not explained; the implications of great mysteries in the universe which we had barely begun to encounter, much less understand, and the film's visual content showed us some of the mysteries without explaining them, leaving us to wonder at the implications, each in our own way.

I'm usually not one to maunder on about intangibles such as poetry and mystery; but they must be evoked, as must the first movie, when considering 2010. There is no way of avoiding comparison; the second movie is too dependent on the first, both in plot (what there is of it) and for an audience - it was obviously made for those who wanted more, who were not content with 2001 as a single masterpiece.

Struggling through the crowd after the 2010 screening, I found myself next to one of science fiction's most brilliant illustrators. It seems that 2001 had been one of the major events in both our lives. His opinion was that 2010 was an OK movie, but "there was no art." About halfway through the film. I had come to the conclusion that there was no poetry. We meant the same thing: he works visually, I work with words, therefore the semantic difference.

Mysteries without poetry are puzzles. 2010 has puzzles; it is also sometimes beautiful (though my eye, contrary to its reaction to 2001, didn't believe much of what it was seeing have we grown jaded in 17 years?).

This notice has been, perforce, subjective (as are all reviews, of course, but less overtly). I've also wiped my screen [i.e., rewritten the manuscript] more in this one than in any review I can remember. There are those who were there in 1968 who will know what I'm talking about; my apologies to the others. Sorry, fellas; you had to have been there.

TRIFFIDS 10; EWOKS 0

The other famous novel to show up on screen - in this case, the screen in my living room - was John Wyndham's classic The Day of the Triffids. It has been filmed before (in 1963) with indifferent results. The new production is an Anglo-Australian effort made for TV, and is to be found on the Arts and Entertainment channel of cable TV if you're lucky.

Here is a textbook example of a novel brought to screen with all values intact, an astonishing feat. A scholarly thesis could be done on why this version works so well; should be done, in fact, but not here. However, there's space for some thoughts, particularly a propos the above comments on the other novel-to-screen. Probably the main point is that

Wyndham's novel is a short one, and is Screen Reviews

not crammed with concepts that can be best (or only) conveyed in words. Essentially, Wyndham wrote a thriller, which implies action, which implies being easily communicated in pictures.

oeing easily colonium cated in priction.

Add to this the fact that the scriptwriters have followed the novel closes,
making no attempt to force into it the
making no attempt to force into it the
genre. (This was a major problem with
the first version; the trifflist — mobile,
carnivorous plants with a vicious sting
and that may have a form of intelligence — were got up to look like
monsters rather than realistic plants.

monsters rather than realistic plants, and they kept cropping up in unlikely places solely to menace the heroine.) Wyndham was a highly intelligent and original writer, so one actually gets a highly intelligent and original thriller, rather than a work of science fiction forced into being a horror movie. The action follows logically from the initial (basically simple) assumption.

To rihose uniformante coungh not to For hose among hose to a stiff and are an artificially mutated species raised for their valuable loot, and fairly easily kept on farms where they can do no harm to the general public. The gimmick is a mysterious meteor shower, visible throughout the world for 24 hours, which blinds anyone who has looked at it. This would be basis enough for a swell end-of-civilization novel, but we've got the triffids loose on ton of it.

we've got the trillids loose on top of it. The here has not seen the meteor shower because he had not been involved in trillid "farming" and was recovering from a trillid sting which may have blinded him. His eyes have been bandaged since the atrack. In a fine opening sequence, he waits in his hospital bed for the nurses and doctor to come to take off the bandages, and only slowly realizes that something is terribly wrong. He finally removes the bandages himself, to find that he is one of the few sighted in a blind world.

From there, Wyndham does indeed create a harrowing end-of-civilization story, with the logical developments that still come as a surprise, such as the vicious blind gangs that capture the sighted and keep them chained to act as eyes. Then there is plague and, of course, the trifflish, waiting out in the countryside for those lucky enough to get out of the anarchic cities. Thriller, indeed.

Again, one must acknowledge the acting, which one is not used to noticing in this sort of thing. But when it's good, you become aware of just how much it adds. In particular, there is the hero as portrayed by John Duttine, another of those skillful young Brits we know from "Masterpiece Theatre."

Is it a better film than Dune? Yes, and yes again. With almost no reliance on special effects, it conveys all the intelligence and excitement of the book as a movie, without being dependent on the viewer having to know the book.

But I'd be hard put to say which I enjoyed more.

And then, for a final quick mention, an unfortunate occurrence on network television called The Ewok Adventure which chronicled the experiences of two human children among the beloved (?) Ewoks of The Return of the Iedi. There was so much wrong with it that it's impossible to catalogue it all briefly. One knows it was made for kiddies; but one does at least expect a certain level of SF sensibility from George Lucas, who wrote and produced it. Somehow, you don't see the Ewoks keeping ducks and llamas. Even less do you see them putting up with the two young protagonists. The adolescent boy was a smart-ass, ignorant, and thoroughly unlikeable brat,

wukkums Twee Prize. I was desperately hoping they'd all be done in by the Gorax. No such luck.

0-

THE NEIGHBOR'S WIFE

It sprouts wings every few weeks but as yet has flown no further than the woodpile in the yard where we found it six months ago.

Colin Wilcox thought it was his wife returned as an angel. It still wore its headset then, lying trapped in a crushed metal basket; Colin freed it,

muttering something about harps and haloes, and the rest of us stayed quiet. Colin carried it into the house and for three weeks nursed it in his bed, on the side unwarmed since Marella,

the old Marella, had her heart attack.
When it could walk on six legs Colin taught
it to fry bacon, weed the garden, milk
the goats, which cower at its touch.

"Reminding her what she forgot in Heaven," he tells us, but she has not remembered speech, this new Marella who is purple and croaks like bullfrogs on the hottest summer nights,

who surely came from somewhere, if not from God. Lately it uses those stubby wings to carry the heaviest logs from the woodpile. For Colin's sake no one has tried to frighten it away.

LYRIC FOR THE DARKMASS by Richard Grant

Richard Grant is a former Coast Guard officer and a Virginian living in exile in Washington DC. His first published story appeared in New Dimensions 12 in 1981. This is his first sale to Amazing®.

Before she died, my mother used to send me out into the blackest night of winter carrying loaves of cardamom bread to the people she had no ceased to love. Among these was a old luthier who lived above the Tomb of Artists, where Aleatory Strand crosses the ponds. I remember the shuddering of willows as I hurried through the park, whose thickest my mind had filled with bands of desperate robbers, and the smell of burning cedar summoning angels from the sky. I had seen neither angels nor robbers then, though I believed in them firmly — more firmly, in truth, than I do now, having trafficked with them both.

The luthier's house lay close by a little courtyard where soldiers gathered in the afternoon to boast of battles and women they had won. Crossing it, I would stare up at the sky through the limbs of mulberries, twisted by centuries of battle with wind and sapworms into shapes that even then I found implausible. Here and there a stubborn winter leaf caught the orange glow of streetlamps, but mostly the limbs stretched naked into the fullness of the night. Their uppermost branches were perfectly invisible between the stars, as I was certain that one day I would be.

Every year, then and since, I surprised some other lingerer outside the windows of that house. It might have been an ill-clothed trouvère with eyes as bright as coins, hugging himself against the cold as he studied the old man's handiwork; or another year a young woman, warm in the vestments of the Court, whose covetous gaze on a mandola somehow excited my pity. In the year my story begins, there were only a pair of lovers.

They stood with mittened hands around each other's waists, drawn to that corner of the city, perhaps, by the inclination toward beautiful things that is common to the citizens of their fantastic state. Standing there, pointing to this and that instrument behind the frosty glass, they seemed to be engaged in something very mysterious and very solemn. I suppose they were not much older than myself, but to the boy I was then they might have belonged to some vastly older breed of humankind. As I came near, approaching the high doorstep, they turned from me and walked arm in arm down the street, and I never saw their faces. I lifted the brass knocker and brought it heavily down, because the luthier was so badly deaf my mother wondered that he could hear his own instruments.



Lyric for the Darkmass

The door opened promptly, almost peremptorily, in the middle of my second knock. I stepped back, ready to apologize for making such a racket, but the face that greeted me was not the luthier's. It was that of a girl my own age: a round face with wide, dark eyes and an unsmiling mouth that said, "My grandfather is asleen."

I stood there in confusion. The girl stared at me and at the basket in my hand, and I remembered why I had come.

"Here," I said, thrusting out the once-warm burden. "It's for him. It's from my mother — a loaf of cardamom bread."

I expected her to take it and thank me and close the door — she seemed that kind of girl — but instead she pulled it wider and said, "Then you must come in and deliver it. He isn't really sleeping, you know. I just tell people that so they won't bother him. They always do, this time of year. Hurry, now, you're letting the heat out."

The door thumped shut behind me, and I found that the hallway was as dark and empty as the street.

"Come on," she said.

We entered a room alight with candles where the air was warm and, for no reason I could discover, smelled of sugared walnuts. I suppose a kitchen must have lain beyond the archway at the rear. Gradually I understood that we were standing in the old man's workroom — the very room into which the lovers had gazed through its broad casement — and that the luthier himself sat wrapped in a heavy blanket before a low grated fire, the kind that gives more of comfort than of heat. He faced away from the door and could not, I thought, have known of my identity, nor even of my presence. Yet as soon as we were fully in the room he began speaking in a voice as sharp as wind down an alley.

"Cobalt trees do the best," he informed me. "Remember that, young man, for you'll see them growing everywhere. People pull them up when they find them in their gardens, but the dead are not so foolish. Ha! Go down to the tombs someday. You'll find them there, sure enough. Wedging their way from cracks in the cenotaphs, you'll find them. Towering over the stones."

"Grandfather," said the girl. She spoke loudly, but with a certain gentleness she had not shown toward me. "This boy has brought you a present." "Towering over the stones," he repeated, then twisted around in his chair

and eyed me with no seeming interest. I was very uncomfortable, and the girl offered no help. Finally, as if it were a sort of forced admission, the old man said, "How is your mother, then?"

I told him my mother was well, and laid the bread on a three-legged stool

I fold him my mother was well, and laid the bread on a three-legged stool before him.

"Cardamom," he nodded. "Never liked it. Still, they say it enlivens the spleen."

I backed away from the strange figure at the fireplace and might very well

- ------ , ----- involvange ngare at the incline

have left without another walnut-scented breath, but in the next moment my life took a turn it has never retraced. It is very odd, I know, to tell you that I no longer remember by what word or gesture the old man held me in that room. But I have since grown used to imperfect understanding, in this matter and many others. I only remember that I stayed, and that somehow the girl was sent to fetch a particular instrument from the rack before the window.

She came back with a lyre.

(Ah, but how little that conveys to you, and how little else I am able to offer, who know little of music, and less of the enchanted engines on which it is performed.)

It was recognizably a lyre, though unlike other such instruments I had seen in the palazzos of the city, and have since heard in the taverns. It was very large, for one thing, and its wood was of the very finest grain, rubbed down to a silken finish by hands that must long have turned to dust. The light from its lacquered neck and brass fittings seemed too bright to be a mere reflection of the fire, as on August nights the moon seems more brilliant than sunshine on a dead planet capt explain. I stared as the girl brought it into our little circle. Very near, its sounding board glowed the color of fading rose petals, and for just a moment the air was tinged with a redolence of summer. The old man said:

"Do you believe in the Darkmass, young man?"

Because I thought myself a very clever boy, I turned with narrowed eyes and said, "I'm not superstitious, sir, if that's what you mean. I don't believe the sun would vanish if we didn't meditate and sing. But I think the custom of observing it is very nice."

"You don't believe, then," the old man nodded, quite as though he had not heard anything I said, which may have been the case. He sighed, and out of sympathy for the elderly and their cherished notions I wanted to contradict him. But at that moment I had no clear idea that I did believe in any-

thing, so I kept quiet.

"Oh, it's quite all right," he said, waving an unsteady hand. "You either believe or you don't. If you don't, you can make no sense of those who do, but at least you have a choise. Someday you may choose to believe, and the whole thing seems much nicer. Whereas once you have glimpsed the world and yoursel' and all your thoughts as mere ripples on a shimmering sea, you have no choice at all. Here, child, come nearer."

He was speaking to the girl. She edged into the light, holding the lyre as if

it were molded of sparkling ice. Then she began to play.

At first her fingers on the ancient metal strings seemed too weak, too delicate to pull notes from the well of that instrument. I am still not certain that this impression was incorrect. Nonetheless a string of notes floated into the air, and if I say little more about that faint and quavering music it is because I have spent so many late evenings trying to fit words to the memory and have finally given up. It was very beautiful. Still it was only a tune, like many others one hears at that season — tunes that are said to coax the sun back from its annual regression. And yet, to the boy I was then, it seemed so very much more.

I remember how the fire leapt from its grate, and the old man's eyes glowed like brandy. The room was warm enough for me to take my coat off, but I held absolutely still, afraid that if I moved the melody would break and its notes run away like quicksilver. I remember that everything seemed very pure, very much itself; the night was perfectly black outside the window, the candles yellow and hot; air rushed in and out of my lungs with a thickness I had never known before, and my skin tingled at the brush of winter woolens.

Many of my impressions of that evening must be manufactures of my imagination. Yet this much I do remember, and one thing more. I remember how a change came over the girl, as she stood by leaping firelight plucking masic from the Ivre.

Until then I had paid her little attention. I had noticed her wide eyes and dark hair, but with no more remark than I had given the faded carpet or the burnished oak of the mantel. Now I saw her as a person unlike anyone else in the world

The light that sparkled from the fittings of the lyre began to transfer itself to her eyes, until they seemed impossibly luminous. A smile danced over her features, and her fingers, as they played across the strings, seemed to tremble with an effulgence of vitality. And — unless this is a feat of misremembrance — I saw distinctly an aureate glow that emanated from her skin and colored the air around her, and more than that: a fainter aura around the old man, indigo in color, and a kind of rosy blur that suggested I myself might be seeing the world through an insubstant vessel. I would go further, to suggest that the fireplace, the carpet, the very scent of the air added each its own pale hue to the ghostly spectrum, but I rather suspect I am making that up.

How long the girl continued to play, or what I said and did when she was finished, must be forever lost in the shifting currents of time. I wen tout into the blackest night of that or any year feeling that I carried a secret light inside me. The few figures huddled in the alleys and dark passages of that quarter of the city seemed infinitely sympathetic. Fellow riders on this magic orb, with whom I shared a fervent wish for the return of the sun. Except for a shyness I thought I had overcome, I might have spoken to any or all of them. Instead I hurried home to my mother, whom I found burning incense in the dark, and my smaller brothers who were already saleep. The next morning the dawn came a little earlier than it had the day before, and I heard people saving what a wonderful Darkmass it had been

You may imagine how impossible it was to keep myself away from the luthier's house. For several days I put it off, guarding the memory of that

112

wonderful night against the incursions of actuality, and for another week or so my chores and the reopening of the Academy made it inconvenient to return. Finally, one afternoon in mid-January, when the ponds were white with ice and the mottled geese circled forlornly over the western ramparts of the city, I seized the opportunity to leave school early on an errand for the Headmaster, delivering a scroll to someone in the Tower of Dreams. This mission left me in fading daylight a short juant from the square where soldiers gathered and bypassers paused by the luthier's window. That day I passed a merchant in a closk and blue leggings as I mounted the steps and tapped lightly on the door.

I was several minutes before the door fell back. I was startled to see the old luthier peering around the corner, dressed despite the hour in his nightshirt. He squinted in what seemed the most profound puzzlement.

"Oh, yes," he said vaguely, when I reminded him of my name. "The bread was very nice. You must thank your mother for me. Only next year

not so much cardamom."

It was all so different from what I expected. To fill the silence I asked him if his granddaughter were home.

"Granddaughter?" he said. I thought briefly that a light had entered his eyes, but he only shook his head. "You must be mistaken, young man. There is no one living here but me."

After he had closed the door and I had trudged down the steps, I wondered for the first of what must now be a thousand times whether the events of the Darkmass evening were no more than a dream. I could barely sleep that night in the throes of my disappointment, and some of the color and brightness seemed gone from the world next morning. But when one is young both the body and the spirit are resilient. Soon the sun grew so warm it melted the ice from the ponds, and alleys and woodlost turned blue with cobalt trees and green with mulberries. Spring unfolded to summer, and the summers of childhood are sure to last forever.

I suppose it will not surprise you that the days grew short again. I was promoted to the upper form of the Academy and had little time to romp through the brown-and-orange byways with my brothers. As we grow older we become so important in our own eyes, or experience grows so vast, that sometimes I wonder how we find room to squeeze any more years in. By the middle of December I no longer thought myself a boy at all, nor a man either, for the errors of both were too apparent. I rebelled at the notion that I should deliver the loaves of cardamom bread at all, when a brother or two could surely set the iob done.

My mother didn't mind. But as she lifted the basket, a whiff of cardamom-scented magic tickled my mind somewhere. I snatched back the chore before she could reassign it and set off into the night, with the same feeling of embarking on a comfortable adventure that I have on opening a book. The recipients of the fragrant loaves were fewer this vear than last —

113

whether through death or a chilling of my mother's affections I did not know or care — but the luthier was still among them. I arranged my itinerary so that, about halfway between sunset and midnight, I entered the square that was now empty of all but the most drunken soldiers. One of these stalwarts pressed his nose to the luthier's glass, and I was greatly irritated, for some of the perfection was already gone from the night.

But the same girl opened the door at my knock, and the sitting room had the same smell of walnuts. The luthier was not as sickly as in my last recollection, and even appeared faintly glad to see me. At any rate, there was meriment in his voice as he raised his nose from my cold offering and said, "Too much cardamom. But that's your mother's doing."

I stood there fully expecting the girl to fetch the lyre and play. To my considerable disappointment, the luthier asked if I would like a cup of tea.

"No thank you," I said, and kept standing, not willing yet to give up hope.

The old man's gaze was utterly unrewarding. After a stretch of several seconds he gave a short nod and said, "I suppose you'll want mulled wine this weer Earth him a class won't wou?"

this year. Fetch him a glass, won't you?"

The girl vanished in the darkness beneath the archway, and shortly

returned with a mug of sweet and steamy liquid.

For all my pretence of maturity, the only spirits I had taken before that

evening were in furtive sips from a purloined hip-flask, shared among twelve boys behind the armory. Halfway through the mug I was feeling elated and a bit sleepy. The old man's merriment increased.

"Are you still an unbeliever, then?" he asked me, in what must have been the plainest condescension. Naif that I was, I replied in kind.

the plainest condescension. Naif that I was, I replied in kind.

"I believe," I informed him, "in the reality of mystical experience. There

is no ignoring centuries of testimony by people who say they have contacted the spirit of the sun. Still, you know, one can believe in the reality of an elephant without wanting to take his word for anything."

I glanced at the girl, looking for a confederate to appreciate my wit, but

I glanced at the girl, looking for a confederate to appreciate my wit, but she was walking away from me, toward the window where the drunken soldier had stood. He was gone now. The old man said:

"You have had no . . . mystical experience yourself?"

"I have not. Nor has anyone I know personally. Yet one reads about this sort of thing in books. I suppose it is a reflection of the need people have to believe in something larger than themselves — something grander, you know, than gravitational mechanics."

The old man nodded slowly, as if this were an idea of profound and revolutionary insight. "It must be a matter of temperament," he said. "Some

people find it easier to believe than not. Others . . ."

He may have finished the sentence; I cannot say. A new sound had entered the room, so quietly that it might have been there for several heartbeats before I noticed. Now it drew all of my attention.

The girl was playing the lyre.

My heart raced in anticipation of something that, in the event, never occurred. The magical things I experienced the year before — or anyway believed I had — the lights and auras and so forth — did not come again. They have never come again except in the occult realms of my mind. This year I heard the music.

It was not, as I had thought, a tune like any other. It was a composition so lovely that the fact of its existence seemed fully as incredible as anything I could recall from that earlier Darkmass. I marveled that such creative purity had ever graced the planet, and burned with questions about the composer, the age and style of the music, whether it had been written for the lyte or merely adapted — the proper sort of question to occur to the sophisticated youth I thought myself to be. But I gave voice to none of these. The music held me suspended in the space between one note and the next, the timeless ether from which notes were born and into which they faded like laughter in a dream. As I listened, I considered how easy it would be to imagine that the candles grew brighter, or the girl's eyes more luminous, or the air more sweet and warm. It was rather amusing, I thought. So this was my magic.

Then I took a sin of wine and the room around me vanished.

In its place was a void, a darkened region like the space between the stars, and yet a region that I understood to be filled to overflowing with . . . well, I can no longer tell you quite what. I may have been compassion, it may have been electricity. It may, for all any of us can know, have been the purest magic. But in that moment, when the goblet vanished from my hand and the hand that held the goblet vanished too, I thought I understood. I felt myself at the center of a million vibrations, shivering through me from the corners of the universe, echoing from the farthest ends of time.

I may have spent a moment or a lifetime in that state, which was surely induced by the wine. When my eyes began to function again they saw only a spangle of dots, each as bright as the sun but smaller, tiny, so that as my eyes skipped from one to another new dots would appear on the sides. Soon I discerned a darker streak crossing what had seemed utter blackness, and with some study made out a bent and withered contour. I blinked, and — as though the language of the soul had been translated to that of the body — once again I understood.

I was standing in the square, watching the sky through the twisted limbs of mulberries. The Darkmass was nearly over, for the eastern battlements were silhouetted against the first blue light of dawn.

I must have been an impressionable child. In any case I think so because I am so much more hardened as an adult.

My mother died that winter and, to support my smaller brothers, I left the Academy to join the dragoons. Though no greedier than most, I took my share of booty, and within a few years was able to buy a modest house north of the Curtain Wall. Two of my brothers lived to finish their studies, and

both are now stationed on the Moor, taking their part in the endless and futile struggle to halt the Easterners. They do not doubt, any more than I, that in the end it will be the walls of our city that save us. if anything can.

After several years of action on many fronts I have been rewarded with a staff assignment in the Quadrant. My office faces out over the Tomb of Artists, and on winter days the sun lies down on the ice-covered ponds like an explosion of diamonds. Nonetheless it has taken me two years to return to the square where the old luther lived, and where passers-by would linger outside the window of his shop. What moved me to go there was the announcement of an auction of musical instruments in that quatrer. Auctions mean death, and this particular auction may have struck me as the death-knell — years belated, I know — of my boyhood. Perhaps, also, I had some inchoate notion of acquiring for myself the old lyre, if it was still to be had. Probably the luthier had sold it years before, or bequeathed it to some relative. It must have been his most valuable possession.

Hardened veteran that I am, I am a naif still.

It was so dark by the time I left the Quadrant that it might have been the full of night, though it was barely evening. The auction had been advertised for five; and by the time I found my way through the avenues that had been so familiar to my youthful feet, it was well past seven, and everything was gone. I turned from the auction-house unsure where I was going or what I meant to do.

You must be thinking ahead of me by now. I soon found myself huddled outside the window of the dead man's house. It was the first time I had found no loiterers there, I thought, but corrected myself at once. The loiterer this time was me.

But my own face in the gleaming glass was less surprising than the candle-light within. For an instant I dared to hope . . . but the old man's picture had been pinned to the wall of the auction-house; in a gesture of false piety that no ghost could find persuasive. Had they sold the house as well? This angered me sufficiently that I made for the doorstep. I saw how low and crumbled the stoop had become, and understood only later that it had been every bit as decrepit on my earlier visits. The knocker was as small and light as ever.

When the door fell open I was confronted by a tall young woman, roundeyed and dark, dressed rather drably in brown muslin and watching me in something like alarm. It must have been my expression. I regretted very much having come here, for I realized now it would only deepen my bitterness.

"Wrong house," I mumbled, avoiding her eye. "Sorry to trouble you." But she said, "No," and then, "Wait."

It was, as you must have guessed, the girl from years before. She was so different now — less familiar, really, than if she had been an utter stranger. And what was she, after all, if not a stranger, this mysterious person I had

seen only twice in my life? My hefuddlement, like all my feelings, must have been painted across my face, for the young woman touched my arm and smiled

"Come in," she said quietly. "Oh, please do. I've so often thought about vou."

I hesitated only one more moment.

The old house was the same, exactly the same - which is to say, much smaller and more sparsely furnished than the house I recalled. She sat me down in the drawing room and brought me a cup of tea.

"But you'd rather have brandy, I guess?" she smiled, turning like a sylph into an alcove I had never noticed. The room was more brightly lit than on a Darkmass evening, and I supposed the young woman had been reading. She returned holding a snifter between fingers that were not so delicate as the

fingers that had moved across the lyre, and she said, "My name is Jennifer." I began to introduce myself, but she said. "Oh, I know that already.

Grandfather told me, on one of his good nights."

Taking a sip I said, "Sometimes I wondered if I'd only imagined you,"

Jennifer laughed again, and I saw that her eyes still possessed the sparkle that had once made me think them enchanted

"I only came for the Darkmass," she said, "and sometimes when Grandfather was sick. He was so helpless in the end, and people were always coming to see him. My father was afraid he would just give everything away."

"I only came on Darkmass, too. And one other time . . . but you weren't here then"

smart old man"

She sat watching me in silence, just as if she had known me all my life. She said, "Grandfather called you an unbeliever. I never knew quite what he meant. Did you? I remember you said something funny about an elephant." No longer a clever boy, I wasn't sure how to reply. "I don't think much

about it anymore," I told her finally. "I guess I've seen too much to think that one explanation is going to fit it all." "Oh. but I think it does. I mean, I believe there is one explanation, even if we can't understand it. Grandfather thought so, and Grandfather was a very

I thought about that. "He made beautiful instruments," I said.

"You mean the lyre?" She drew the hair back from her face; her skin was as smooth as polished wood.

"Who wrote that music?" I asked her.

But she stood up and walked to a tall cabinet. "That was nothing," she said across the room, "A courtly dance - a Saraband of something or other,

You don't know much about music, do you?"

When she returned to her seat she was carrying a dusty old instrument, holding it away from herself so as not to soil her dress. She sat down as though expecting me to speak. When I did not, she said, "Don't you recognize it?"

Even then I didn't. It was not until her fingers plucked one of its strings, tuning it again after years of disuse, that I knew she held the magic lyre of my boyhood. She could scarely have found a better way to puncture the last of my illusions. The old instrument must have been held back from the auction not, as I supposed, because it was too precious, but because it was all hut unsaleable

"Do you want to hear it again?" asked Jennifer.

No. I emphatically did not: I could not bear any further disappointment; but I had not time to reply before Jennifer started to play.

This is the end of my story, or nearly so. If you came to hear a tale of magic and enchantment, I suppose you will leave disappointed. But if you wanted only a story of the Darkmass, a tale which unwinds to reveal some seed of truth about this season, then I hope I have given you one, and as quickly as I can I will conclude it

Jennifer watched me while she plucked out her melody on the lyre, and I held her gaze as I had so many years before. I saw the brilliance in her eyes and the smile that danced across her face, just as I had seen them on that first Darkmass, and I heard the beauty of her performance as I had on the second - though at the time I had wrongly credited that beauty to the music itself. As for those other things, those stranger feelings I have tried to describe in this narrative, I cannot say that I felt them again that night, or that I have ever felt them since. Yet I will say that while I listened to Jennifer play I understood those things once again, I understood, and I believed. I believed that I had glimpsed — though long ago, and fleetingly — something of what we celebrate when we light candles or sing songs or bake loaves of cardamom bread on the blackest night of winter.

But my story runs ahead of itself: I have told you what I believed before telling you why.

As Jennifer played what must have been a very ordinary song (and hummed softly as well, which she had not done as a girl) a change came over the lyre. Some of the smoothness of her skin seemed to communicate itself to the scratched and dusty wood of that instrument, until it glowed the color of fading rose petals. The light of her eyes found its reflection in the old brass fittings, which began to shine as bright and golden as the candles in the room. Even the metal strings, dark with oxidation, seemed silvery and new

Amazed, I sought Jennifer's eyes, to learn if she, too, had seen this transformation. When I found them, and stared again into their warm brown depths, I learned something infinitely more - something I had long struggled to know, and now discovered unfolding within myself, where it had lain, like a seed, all along. It is commonly thought to be no more than a feeling, prevalent especially among the young and visible on winter evenings outside windows where beautiful things are on display. But I think it is more than that; I think it is the ether that fills the space between the stars, and the spirit that draws life from gritty dirt to nourish mulberries as they stretch their limbs for the sky. Maybe it is not magic, after all.

Or maybe it is all the magic in the world.



DIALOGUE WITH A SPIDER

In every weather, wet or dry, How tensely you anticipate The serendipitous but certain fly. To us what seems mere happenchance To you is sweet mosquito pie And destined by the laws of Fate To be your partner in the dance Of your demand and its supply.

Where's the error in such a plan? If files are born, then flies must die. This swamp would be a churning hell Of hungry gnats, were 't not for I. Did not the gody Son of Man Eat lamb — and so elect to die? You have been known to buy and sell — But hush, here comes another fly.

- Tom Disch

KATZENJAMMER by Dian Girard art: George Barr



The author tells us that she and her husband live in a small house with an atrium and columns — she's not at all sure why, but they like it. Both are senior engineers in the computer industry, with computers of their own at home to keep them but evenings and weekends.

Cheryl Harbottle left work early and hurried home through the pristion corridors of Cincinnati Dome. Mrs. Peabody's door was open as usual, the better to see what all her neighbors were doing, but Cheryl managed to get into her apartment without being dragged into a conversation.

The workmen were gone, and the new bay window looked lovely. It wasn't a real window, of course, but the view screens were set up to show a Sweeping Panorama of rolling hills dotted with little trees. It looked just like the view out of a twenty-story office building — no mean trick considering that the apartment was nearly 100 feet underground.

There was a control knob on the side that let you change the lighting from DAWN to MIDDAY, to LATE AFTENDON, to DUSK, and let you switch to any one of three other scenes — BIRDS IN CHERRY TREE, ROLLING BREAKERS, or FLOATING CLOUDS. It was really nice. And the workmen hadn't left a mess in the living room, stolen everything she owned, or passed out dead drunk on the floor. Things were looking up.

She straightened the cushion that covered the window seat (optional extra) and decided she'd have to get a few bright pillows to set it off. Yes, really, it was going to give the living room a whole new atmosphere.

Just then the Presto Parcel Handler in the living room wall beeped gently and slid a large box out onto the floor. Cheryl glanced at the mantel clock. Right on time. The twins' dog had arrived.

The box was about waist high, which seemed pretty big for a dog, but manufacturers do use a lot of packing. She walked once around it, shrugged, and pulled the invoice off of the top. SALE MERCHANDISE—NON-RETURNABLE. If it hadn't been on sale she wouldn't have bought it. Dogs ost one hell of a lot of money, but the twins had wanted one for years and she iddin't have the heart to say not.

It was also an "irregular" — something she checked into very carefully before she ordered it. She certainly didn't want one that was missing a leg or something. The taped computer spiel assured her that irregular meant "some slight defects in color, or other hardly noticeable damage." Reassured by this she listed her style preferences — the sale dogs being on an "as available" basis — and ordered the fool thing. Now here it was, and she had to put it together.

Cheryl pulled open the box and tossed out a top layer of packing. A large flat envelope just underneath was marked INSTRUCTIONS in big red letters, and there was a white booklet labeled DOG OPERATOR'S MANUAL. Under the papers was a tightly packed mass of shaggy white fake fur.

The instructions seemed pretty simple. The kit came with a "ball jointer." You slipped the joints together and put the two ends in the jointer. It heated up the plastic on the ends and the joints expanded into an unbreakable ball and socket. This in turn held the metal flanges that controlled the dog's movement.

She was just about to get started when the front door bell chimed. When she opened it, there was her neighbor from across the hall — Mrs. Peabody. "That Peabody Woman," as Cheryl referred to her when particularly exasperated, was a plump female of rather uncertain age with improbable yellow hair. She dressed in ruffled pastels and always smelled of gardenia perfume and gin. At the moment she was tottering on gold and marabou high-heeled slippers and regarding Cheryl with avid interest. Her pink Plasti-Poodle was standing by her side, also eyeing Cheryl with interests.

"I saw you come home — so early, is everything all right at work?"

Cheryl forced her face into a smile. "Just fine. What can I do for you?" Men. Peabody fluttered her long blue-mascara-ed eyelashes. "I wonder," she said in her high-pitched little-grid voice, "do you have any real lemon? I'm making some little snacks for a friend who's coming to visit, and I just have imitation lemon on caviar."

"Ah, no. Sorry," Cheryl said, preparing to close the door.

"Oh, how awful," Mrs. Peabody pouted. "I was so sure you would. You're so . . . so . . . domestic!"

She glanced around the living room, appraising everything from the imitation raw silk on the couch to the grass-cloth on the walls. "So ethnic, I mean. I guess I'm just too formal, myself."

Since Cheryl had already seen Mrs. Peabody's gilt and lavender plush living room she merely smiled and pushed the door a little further closed.

"But I suppose your husband likes it this way?" Mrs. Peabody simpered. "Which reminds me, I haven't seen Mr. Harbottle for a few days. I hope nothing's wrong?"

Her little piggy eyes were bright with curiosity, and Cheryl resisted the impulse to tell her that Logan was serving ten to twenty for an axe murder.

"He's out of town on business," she said in as curt a tone as she could muster, and had the pleasure of seeing her neighbor look a little crest-fallen. "Sorry I can't help you with the lemon." She shut the door gently but firmly and went back to her dog.

Still seething over Mrs. Peabody's remarks, Cheryl read through the instructions twice and then laid the dog parts out on the floor. The feet were the first thing that impressed her. They looked awfully big.

They undoubtedly looked big because of that thick coating of shaggy white fur, but the legs were awfully long, too. As it turned out, there wasn't much packing material in the box at all. The whole carron was full of shaggy white dog. It was so shaggy that she had to turn the head over twice before she could decide which end was the front. The only way she found out was by uncovering a black plastic nose and two bright brown glassy eyes.

The head also had a long pink plastic tongue and an alarming number

of white teeth - which turned out to be soft and bendable like a baby's squeeze toy. That was nice. She didn't have to worry about one of the kids getting snagged by the beast.

It took Cheryl nearly two hours to put the dog together. When it was all connected it was embarrassingly large and didn't match any of her three choices. She stared at it dubiously. It was certainly not a chow-chow (first choice), it didn't look much like a cocker spaniel (second choice), and if

that was a toy poodle she was prepared to eat it.

It stood staunchly in the middle of the room on its four furry feet. She walked around it, dangling the top panel in her left hand and holding the small activator pack in her right. She had never seen such a big beast in her life. It didn't have any tail, and it didn't seem to have any gender. She decided it had to be male - simply because nothing feminine could possibly be so unattractive. It was just one incredible mass of white shag, except for the panel she was holding, which was black shag and probably came from a different kit. Well, that was what happened when you bought things on sale.

Cheryl shrugged. It was simply going to have to spend most of its time sitting out of the way in a corner somewhere. She slipped the activator in

place and snapped the panel into the middle of the dog's back.

There was a quiet whrrrrr sound and the dog's ears lifted slightly. It stuck out its long pink tongue and lazily curled up the end of it. Then it stretched out its front legs, lifted up its rump, and stretched.

Cheryl thumbed rapidly through the operator's manual, looking for the list of commands Ah!

"Sit!" she said firmly.

The dog looked at her. "Meow?"

Oops! Even to her ears that didn't sound right. Admittedly, she hadn't owned a dog - real or plastic - since she was a child, but she had a

feeling "meow" wasn't part of their regular vocabulary.

She leafed through the manual, trying to figure out where she had gone wrong. Meanwhile the dog was stalking stealthily around the room, sniffing at things. At least, it was trying to. On its first pass it knocked over a potted fern. Then it tried to rub up against the coffee table, tipped it over, and sent two figurines to knick-knack heaven.

Cheryl thumbed frantically, and the words on the invoice floated in front of her eyes like some damnation at the gates of hell -

NON-RETURNABLE

She made her way to the couch and sat down, trying to ignore the series of small crashes that followed the creature's progress around the room. There was nothing in the manual that told her anything useful. She had done everything right, but something was terribly wrong. She looked up - just in time to see her plastic pet jump lightly to the couch beside her.

At least, that's what she assumed it was trying to do. Unfortunately 95

pounds of plastic pooch doesn't come down as lightly as 5 pounds of plastic pussy. The couch went over backwards and Cheryl found herself lying on her back, staring up at a shaggy face with a black button nose as its only visible feature. There was a quiet rrrrrrr sound coming from its interior. It was purring.

Cheryl pushed the beast roughly to one side and crawled off of the couch on her hands and knees. It walked alongside her, rubbing against her and pushing her two feet sideways for every one she managed to make forward, which reminded her of an old puzzle about a frog.

"Nice kitty," she said through gritted teeth. "Nice kitty."

Kitty meowed with gratification and purred even louder.

Cheryl managed to struggle to her feet, holding onto the upturned legs of the couch for support. She was going to have to turn the thing off, but she didn't remember seeing a switch. That meant she had to pull off the top panel and get at the activator, which was probably the cause of her problems anyway. The idiots at the factory had put in one for a cat instead of a dog. It could have been worse; she could have gotten one meant for some zoo. She closed her eyes briefly and imagined a plastic rhinoceros blundering around the room.

Wearing an ingratiating smile, Cheryl reached out for the beast's back. Unfortunately it seemed to take that for an invitation to play, arched itself up for just a second, and then rolled over onto its back, shaggy feet waving in the air. The panel, naturally, was now underneath.

"Meow? Prrt!" Kitty waited for her to go on with the game, then sat up and began to lick itself industriously with that long pink tongue.

Cheryl sidled around behind it, but at the last minute it turned to watch her. In desperation she jumped at it, intending to hold it between her

knees while she unsnapped the cover panel.

The first part of the plan worked fine. She managed to get her legs around it. Then it simply sank to the floor, pushed forward, and Cheryl sat down abruptly with a thud that jarred her teeth. She sat there, counting to 100 by sevens, and thought of things she'd like to do to the owners of the Plasti-Pet corporation. None of them were pleasant.

She glared at the creature as she clambered to her feet. To hell with the money! Kitty was about to become a vagrant. She stomped over to the

apartment door and flung it open.

"Out, Kitty? Want to go out?"

Kitty paced delicately toward the open door, tipping over the end table and sending the contents of a small candy dish bouncing across the rug.

There was a slight delay while one of the candies was chased behind the upturned couch, but eventually Kitty wandered toward the door where Cheryl was standing with her arms folded and one toe impatiently tapping the floor.

Kitty rubbed against the door jamb, and then against Cheryl, who only

saved herself from falling by grabbing the door with both hands.

The air had to be sniffed, and the floor inspected. Cheryl was about to plant a foot on Kitty's unesthetic rump and shove when the door across the hall opened and Mrs. Peabody looked out.

"Why, Mrs. Harbottle. You have a dog!" Cheryl tried to smile and paused in mid kick. "Um, ves."

"Goodness, how unusual." She tittered. "Isn't it just like you to own

something so, ah, unique! Whatever kind of doggie is it?" "It's a . . . a . . . Katzenjammer! Very rare," Cheryl said hurriedly.

"Well," said Mrs. Peabody, preening her rather brassy curls, "if I see it wandering around I'll certainly be able to tell people who it belongs to. It's so big. I really do like smaller pets, like my sweet little Scootles."

Scootles, the Plasti-Poodle, peered around the edge of the door. Kitty went suddenly rigid, arched its back, and hissed loudly. Cheryl reached down, clamped both hands around its muzzle, and jerked the beast backwards into the apartment.

Mrs. Peabody's jaw dropped and she stared with disbelief. She was still staring when Chervl slammed the door in front of her.

"You!" Cheryl said through gritted teeth. "I would like to rip you limb from limb and make a throw rug out of your lousy pelt!" She picked up the nearest heavy object - which happened to be the candy dish - and heaved it at Kitty with all her strength. It bounced off of Kitty's wellpadded side, and the creature paid absolutely no attention.

Cheryl looked around wildy for something else to throw and then stopped. The creature wouldn't care anyway. She could lop off its stupid acrylic ears, pull out its plastic teeth, and kick it from here to doomsday. It wouldn't even cringe. Mistreating it would be about as useful as threatening her oldest son's micro-computer, or screaming obscenities at the automated vacuum cleaner. Kitty wouldn't care, and wouldn't fight back. Somehow, mayhem under those circumstances lost its zip.

Cheryl tried to remember what little she knew about cats. They were clever, independent, and liked catnip. None of those traits sounded helpful. They were also playful and liked dark places. That sounded more

promising.

The Presto Parcel panel covered a large dark niche. The dog and its carton came out of it; the dog could go back into it. After that it was the problem of the U.S. Postal Service.

She tore several pages out of the useless operator's manual and crumpled them up into a nice crackly ball. Kitty laid its ears back and wriggled its rump in lieu of twitching a tail.

Standing well to one side, Cheryl pressed the OPEN button with her left hand, and rolled the ball into the opening with her right. Kitty thundered in after it. Chervl hit the CLOSE button, and then the SEND key.

She was gleefully dusting her hands together when every light on the

panel went on and the buzzer screamed. The door flipped open and Kitty thundered back out — rejected with NO ZIP CODE, INSUFFICIENT POSTAGE, and UNADDRESSED PARCEL. It caught Cheryl with one shaggy shoulder and sent her sprawling.

Cheryl got painfully to her feet, rubbing the bruised portions of her anatomy and warily watching Kitty. Maybe she could lure it back into the shipping box and close the lid on it. Then she could slap some postage on

it and mail it somewhere, anywhere.

She turned the big box over on its side and dangled a long piece of packing material enticingly in front of the opening. "Kitty, kitty, kitty, Come on, n-i-i-i-ce Kitty,"

Kitty stopped pulling the potted fern to pieces and crouched down, gathering its feet under it. Cheryl moved the packing material up and down in little ierks. "Puss, puss, puss. Get it!"

Kitty sprang, batting at the piece of packing with those awkward oversized paws. Its momentum carried it forward, into the box.

Unfortunately, its momentum also carried it against the end of the box with a resounding slam! An assembled dog does not pack into as small a space as one that's still in pieces.

The carton went over with Kitty inside of it and Cheryl under it. What little breath she had went to pronouncing words she had once heard from

a drunken space pilot.

She heaved and pushed at the box, and finally managed to tilt it. Kitty clambered heavily out, still batting at the packing material and having a marvelous time. Cheryl scrambled to her feet and, staggering sideways, fetched up against the edge of the new bay window. If only it were real She could either push the bozo out, or jump herself. At the moment she didn't care which

Kitty had managed to bat the packing material into a corner, and was playfully trying to get it out again. Playful! The thought came to Cheryl like a ray of sunlight. Cats like to play. They especially liked to play with

little quick moving things.

She flipped the window selector to 3. The SWEEPING PANORAMA faded out and a network of leafy branches spread across the screens. There was a faint background noise of chirps and twitters, and tiny little birds hopped back and forth.

It caught Kitty's attention right away. The Plasti-Pet jumped into the window seat, narrowly missing a crash into the screens, and froze, rapt with attention

Cheryl lunged with both hands. She ripped off the black top panel, grabbed the activator, and heaved. It came up, and Kitty went limp - or as limp as plastic, foam padding, and acrylic fur can go. Cheryl sighed with relief and sagged against Kitty's cushiony side.

As she sat there, recovering her breath and her poise, a look of sheer fiendishness spread slowly over Cheryl's face. After a few minutes she got slowly to her feet, staring at the small activator pack she was clutching in her hand.

She slipped quietly out of the apartment and tiptoed across the hall. Mrs. Peabody's door was slightly ajar, and an off-key rendition of "Stormy Weather," punctuated by a few hickups, floated in from the rear of the apartment. There were a few soft clinks, and the tinkle of ice in a glass. Scootles was curled up in a gilt basket padded with pink plush and lavender how.

Cheryl moved forward, a smile of false friendship on her lips. Scootles lifted its tail in an uncertain wag. Cheryl grabbed the small plastic beast around the muzzle and quickly opened its panel. She swapped activator packs, clicked Scootles back together, and scurried outside to safety.

There was a click-clack of high heels on parquet, and then Mrs. Peabody's voice at its saccharine worst, "Ooo, sweetums Scootles. Give Mumsv a kiss."

Mumsy a kiss."

Cheryl heard a yowl, a hiss, a shriek from Mrs. Peabody, and then a thud that jarred the floor as something heavy sat down hard.

Head up and shoulders back, Cheryl strolled back to her apartment. She was avenged. And a moment later, when she said, "Sit," Kitty sat.

Well, yes, we are looking for stories, and from people who have never sold a story before as well as from long-time professionals. But no; we do not want to see you make the same mistakes, over and over again. So; we wrote and printed an 11,000-wood booklet, Constructing Scientifiction O Fantasy, to assist you with manuscript format, cover letters, return envelopes, and other details of story submission, along with some ideas on Plot, Background, Characterization, and Invention. These cost us two dollars each, with mailing and handling; we'd appreciate receiving this amount (check or money order, please; it's never wise to send cash through the mail). If you want two copies, send us \$2.05; three copies, \$3.00; and so on: in other words, 50° for each additional copy after the first one, which is \$2.00. If you subscribe to AMAZING* Science Fiction Stories today, we'll send you a copy of the booklet free.

Order from us here at AMAZING* Science Fiction Stories. P.O.

Box 110, Lake Geneva WI 53147.

The Observatory

by George H. Scithers

Most of what most people know about Murphy's Law is all wrong.

For one thing, the Law isn't folk wisdom with a handy name tacked on. There's a real Murphy - Mr. Edward L. Murphy, U.S.M.A. class of 1940, ex-U.S.A.F., more recently in Quality Control with one of the big West Coast aerospace companies. He stated the Law back in 1949, when a contractor's technical representative installed 16 strain gauges backwards - which is to say that there were two ways the gauges could be installed, and the tech rep had installed all of them the wrong way.

Murphy's first formulation, then, was something along the lines of: "If there's any way to do it wrong, he [the tech repl will." In that form, it's a comment on a particular individual; generalized, it becomes a Law of almost universal application.

Only, most people have heard the wrong generalization. What Murphy did was to generalize from that particular tech rep to people in general, thus: "If there's any way that some one can do it wrong, someone will." Then he (like any good Quality Control man) focused on what to do about it. That's just the opposite of the essentially futile formulation: "If anything can go wrong, it will," with its corollary: ". . . and it'll pick the damnedest time to do it." Murphy, then, meant his Law to

lead people to do something about mistakes that are waiting for someone to help them happen; in its most obvious form; if two hoses connect part A and part B, don't depend on diagrams, labels, and color-coding.

Instead, make one hose (with connections and so on) of one size; make the other hose a distinctly different size. Make strain gauges so that they'll fit only one way.

Indeed ves: there may be some complete idiot who'll force-fit the wrong sized hose - but anyone that much of a damn fool can be found . . . and fired. Off the job and off the property, he's no longer your problem.

Essentially, then, Murphy and Murphy's Law, correctly stated, don't merely present a problem - they work to solve problems. Murphy's Law is about capabilities, and solutions, and making things so that no one can put them together wrong. Murphy's Law suggests that we'd better check the spelling of our magazine's title on the cover - every time.

But it goes farther than that. The attitude, "if anything can go wrong, it will," makes for poor story-telling; it assumes that the Universe is out to get whoever is unlucky to get caught in this story, and the Universe will surely stomp them flat as soon as it gets around to it. But Einstein didn't believe the Universe to be malevolent. nor does Murphy. People can fail; but where they fail, they can fix. Horror fiction can be terribly, terribly effective for its inevitability; but its message is futility, futility, and the Universe is out to get you. But that's not our kind of story-telling, nor is it Murphy's.

Scientifiction - and science fiction is about capabilities — and solutions - and above all: people solving difficult problems; making what can go wrong, go right !

BET by Wil Creveling art: Karl Kofoed



Wil Creveling lives in a remodeled country schoolhouse in deep upstate New York with his wife, a screwy dog, eight cats, and 37 maple trees. His hobbies are collecting old Chryslers and making models of World War II tanks.

He has been an Air Force intelligence officer, a high-school English teacher, and other things too boring to mention. He is now cultivating the Muse; this is his third fiction sale, and his first to Amazing[®]. But he wishes it to be known that he is not working on a novel. There was a man who was a good man, but he was a gambler. He never acquired the habit: he was born that way, I guess. Some people are. And with every passing year it got worse.

So he joined the Space Force to escape temptation, but it didn't work. Nothing ever does, they say, for those who have the fever. He found himself betting his crew-mates as to which quadrant of the shipscreen would be struck by a meteoroid next, or whether the next world they touched would have life on it or not, or who the next gunner would be to come down with the grasshopper delusion. And he had luck. He gained quite a few sollars that way, and a few notches up on promotion. You could bet your stripes away in the Old Navy, and some people did.

Maybe it was his Arcturan blood that was to blame. No Arcturan, they say, can refuse a bet, and they have a pretty precise sensing for the odds. That may be why their admirals have always been so good, and why they beat the rest of us during the Arcturan Uprising that we all opposed so

much at the time: remember?

Yes, it may have been his Arcturan blood. He joined the rebel forces early on, of course, and he won his first command in a game of klob while on patrol off Deneb. From then on, his rise was rapid, for he found that war was the biggest gamble of all. He had always relished the games with high stakes, and he played it with a will.

His tactics were damned odd. He bet his way to victory. He had this Capellan swamper with him, you see, whose personal services he had won in a hot game of mouse-dice in the old days — and as everyone knows, Capellans are notoriously wrong-headed, and unlucky as hell.

And he kept this Capellan with him at all times, right by his side, in spite of the smell, and every time the maneuvering got sticky, Hender would turn that way – yes, it was he; didn't I say so before? — and ask: "On which flank is the enemy weaker, the left or the right?"

And the Capellan would say, "The right."

And Hender would say, "I'll bet it's the left," and he would hit them there, and by god they were.

Or he would say, "Where will they attack, from the east or the west?"

And the swamper would answer, very positively, "From the west, of course."

And Hender would say, "No, I'll bet they come from the east, and if we go west, we can elude them," and he did.

And sometimes the Capellan would make her answer, and Hender would say, "I'll bet you're right. Even a Capellan can't be wrong all the time," and more often than not it would be so.

Well, we all know what happened. As Hender rose in rank, the Arcturan forces began winning more and more, outnumbered though they were. For that's all war is, you know: successful guessing. But he couldn't have done it by himself, you see, alone in some snace bunker. He needed the challenge of

the bet, to get his juices flowing and give things a tang. And he bet well most of the time. He knew when to raise and when to fold. Oh, sure — we all lose a pot now and then. So did he... that nasty affair on Rigel IV... a bad roll, that was. But in the long run he broke the bank.

Then, just as the war was nearly over, that — Thing — appeared: Object, Force, Manifestation, whatever it was, from god knows where or when: from another dimension, perhaps, or another time. It certainly wasn't from

this universe, as its actions soon began to show.

Lord, we couldn't stop it! It didn't obey any rules we could understand. Every time we pushed it back a little, here, it would sneak around somehow and creep in a little more over there. It was slow, but it was advancing. And everywhere it passed, stars snuffed our like matches and worlds puffed into dust.

Hender could see how slow it all was. It would take centuries, and it drove him mad, for he had bet his Consulship that we would win, and he knew he

could not live long enough to see how the bet came out.

So he went to where the Thing was, and he landed on a stormy planetoid directly in its path. He stood forth on a howling rock and shouted, "Stop iil This takes too long, and it's too messy. Let's finish it right now. Let's make a bet, and he that wins can do as he pleases: and there's an end to it."

"Can this be?" the Thing said somehow.

"Yes, it can be," Hender roared. "I run this whole shebang, and I have the authority."
"Good," the Thing said. "There are other universes to destroy, and this

one wearies me. I would fain be done with it, and move on."
"So that's how it is," said Hender. "You want to destroy the whole

Universe, do you?"
"Of course," said the Thing. "It is what I am for."

"Right: then there's our stakes. You want to destroy the Universe, and I want to preserve it. Simple enough. So what should we bet on?"

"Oh, there are many things," said the Thing. "But before we name one

... are you sure you have the authority?"

"Damn right," Hender said. "And if anyone doesn't like it, he can vote against me in the next election. You know," he grinned, "if I win, I'll bet I'm re-elected."

"And if you lose?"

Hender shrugged. "Who will there be to vote?"

"You have right. Then let us do our bet."

"Call it."

"Hmm. Let me see . . . I will bet that . . . yes! that a star will go nova . . . that you and I can see from here . . . within . . . an hour by your clock."

"No fair," Hender said. "You'll cheat."

"How dare you, sir? We universe-destroyers have our honor, you know! No; you have my word on it that I will not."

"All right," Hender said. "You're sure you're not tricking me?"

"Actually, yes," the Thing sighed. "I can darken them, but I can't make them flare up. If I could, I would."

"True," Hender said. "And we haven't seen that, so you can't do it. All right. Let me think about it."

And he thought of the vastness of space and the great number of stars

there were that *could* go nova.

And he thought of the endless eternity of time and the many, many minutes there would be in which no stars would go nova.

minutes there would be in which no stars would go nova.

And the bet-lust possessed him, and his gambler's blood pounded in his veins.

"All right," he said. "I will bet that . . . in the next hour from — now"
— and he punched his watch and laid it on the black rock at his feet — "it
will not happen."

"It is done," said the Thing.

Then: did time pass? Did the possible stars above not multiply in myriads, until the entire sky seemed a sheet of light? Did the sluggish minutes crawl by at all?

Sinister, threatening light above, clogged time below. Hender began to sweat in his helmet, but his blood sang in his head. This was a bet!

Centuries went by, eons. The hour, the deadly, heady hour, must be nearly gone. Hender began to exult. He would win! He sank to one knee to peer at the watch. The numbers read: 12.

No. No. But it was. He schooled himself to patience. Mentally he ran through the multiplication tables. He recited the Arcturan Declaration of Contempt. He computed the odds for every possible combination in a hand of purplejack. He counted his toes.

At last he could stand it no longer. He stole another glance at the watch.

56! He — A flash

A deadly, hateful flash above.

"You have lost," said the Thing. "Step aside, please, so I can destroy your universe."

"Not so fast," Hender said, holding up his hand.

"What -?"

"One more time," he said. "Double or nothing."

Do you know, the fool Thing fell for it?

Hah. Do you think you can beat an Arcturan twice at the same bet . . .?

Are we still here?

And don't you wonder what other universe Hender would have put up if he'd lost?



The world is waiting. Be an exchange student.

Step into an adventure filled with opportunities and challenges. For many Americans, that adventure remains the most incredible experience of their lives. An experience rich in life-

long friendships and memories.

As part of International Youth Exchange, a Presidential Initiative for peace, you travel to another country. Live abroad with your new host family. Learn new skills. Go to new schools. Make new friends. And return with knowledge and experience that could make a difference in your future.

Young people from all segments of American society are

being selected.

If you'd like to be one of them, write for more information on programs, costs and financial aid. Help bring the world together, one friendship

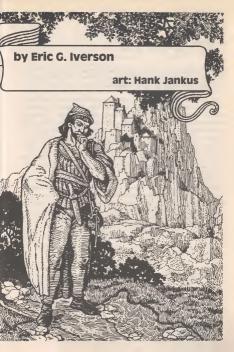
at a time.

Write: YOUTH EXCHANGE Pueblo, Colorado 81009



UNHOLY TRINITY

Eric G. Iverson's fondness for the Roman Empire (its later phase now referred to as "Byzantine") is such that he would have liked it to endure indefinitely. Here he has spared it the fateful challenge of Islam; but history cannot be without its problems. Here is one, arising in the heretical West.



With a grunt of displeasure, Pavlo sat down at his desk to draft his monthly report. The tourmarch of the border fortress of Pertuis inked his pen, sent it scraping over the parchment; "Events of the month of May, 1315 —"

He looked at the year he had carelessly written, swore, and scratched it out. Bad enough he had to compose in Latin. Both men who would read his report - his immediate superior Kosmas the kleisouriarch of the Pyrenees and Arkadios the strategos of Ispania - came from Constantinople. They would sneer at his lack of culture. Despite still being one of the two official tongues of the Roman Empire, Latin had far less prestige than Greek.

Using the northern style of dating on an official document, though, might get him marked down as subversive, even if it was also popular in Ispania and Italia too, come to that. He substituted the Imperial year, reckoned from the creation of the world rather than the Incarnation: "- May, 6823, the thirteenth indiction."

He settled down to writing. Most of the report was routine: soldiers and horses out sick, deaths (only two - a good month), new recruits, supplies expended, traders traveling down through the pass of Pertuis into the Empire, tolls collected, traders going up into the Franco-Saxon kingdoms, and on and on

The description of the garrison's drills was also something to get past in a hurry, except for one part. There he checked his own records, which he kept meticulously: "Liquid fire expended in exercises, two and five-sevenths tuns. Stock remaining on hand —" He flicked beads on his countingboard. "- ninety-four and two-sevenths tuns. Seals of wholly expended tuns enclosed herewith?"

He did not know what all went into what the barbarians called Greek fire, or want to. It was shipped straight from the Imperial arsenal at Constantinople.

He did know that he had best start looking for a good place to hide if he could not account for every drop he used. What happened to officials who let the northerners get their hands on the stuff did not bear thinking about.

His pen ran dry. He inked it again, wrote, "One siphon was damaged during fire exercises. Our smith feels he can repair it." Pavlo hoped so; Kosmas would take weeks to send him another of the long bronze tubes through which the liquid fire was discharged.

The tourmarch scratched his head. What else needed reporting? "The Franco-Saxons have lately shown a good deal of interest in the woods just north of the fortress. The forest being on their side of the frontier, I have only been able to send a rider to make inquiry. They say they are after a nest of robbers; their count declined the help I offered."

Pavlo wondered if he should say more, decided not to. Even if the barbarians had sent a lot of men into the woods, they were still comfortably out of arrow range. And they were such bunglers that they might need a couple of companies for a one-platoon job.

The tourmarch folded the parchment into an envelope, lit a red beeswax candle at the lamp he always kept burning to have a fire handy, and let several drops splatter onto the report. When he had enough, he pushed his signet ring into the soft, hot wax.

Shouting for a courier, he came from the gloomy keep into the bright sunshine of the courtward.

Something hissed through the air, landed with a surprisingly gentle thud twenty paces in front of him: a wicker-wrapped earthenware pot, a little bigger than his head. A wisp of smoke floated up from the top. At the same time as the sentry on the watchtower cried "Catapult!" another one thunked down in the courtyard.

"To the walls! They're coming!" the sentry screamed. Troopers snatched up bows, spears, and helmets and dashed for the stairs to the rampart.

Pavlo cursed in good earnest and tore his report in half. He should have been more alert — the Franco-Saxons had been brewing mischief after all, though what they hoped to accomplish with a bombardment of crockery was beyond him.

Suddenly the very air seemed torn apart. Pavlo thought a thunderbolt had struck the fort — but the sky was clear and blue. Something hot and jagged whined past his face. A cloud of thick gray smoke shot upward.

The fourmarch looked round dazedly. Two men were down, shrieking; a third, who had been closest to the pot, was hardly more than a crimson smear on the ground. The cataclysmic noise had frozen the rest of the soldiers in their tracks.

Outside, Pavlo heard the drumroll of hoofbeats, the whoops and warcries of the barbarians, horse and foot. His stunned wits started working again. "Go on! Move!" he roard to his men. Discipline told. They beam to obey.

Then another blast came, and a few seconds later another. Almost deafened, Pavlo could barely hear the wails and moans of the wounded. Smoke filled the courtyard; its acrid brimstone reek made the tourmarch cough and choke.

"The northerners have called devils from Hell!" someone yelled.

The sentry's voice went high and shrill. "Heaven protect us, you're right!

I can see them capering there, just at the edge of the forest, all in red, with horns and tails!"

"Shut un?" Paylo bellowed furiously to no avail. Half the carrison was

"Shut up!" Pavlo bellowed furiously, to no avail. Half the garrison was screaming in terror now. Against devils, no discipline could hold. And devils or no, those cursed catapults kept firing from the woods. A wrapped crock landed almost at the tourmarch's feet. His mind made an intuitive leap. "It's not demos!" he cried to whoever would listen. "It's whatever's in these—"

The explosion flung him against the wall of the keep like a broken doll. A few minutes later, a bigger one smashed the gates of Pertuis. The Franco-Saxons stormed in.

The beamy merchantman sailed slowly toward the Ispanic coast. "Won't be long now, sir," the captain promised.

"The Virgin be praised!" exclaimed his passenger, a tall, thin, dark man with a neatly trimmed beard, bladelike nose, and oddly mournful eyes. "I've spent more than a month at sea, traveling from Constantinople."

"So you said, so you said." It meant nothing to the captain; he spent most of his life on the water. He went on, "Aye, now we've weathered that little island back there (Scombraria they call it — name means "macker! fishery," y'know), we're home free. Island's not just for fishing, either — shields the New Carthage harbor from storms."

"Of course," the traveler said politely, though he had trouble following the man's guttural African dialect of Latin. He went back to the deckhouse to reclaim his duffelbag and wait for the vessel to anchor.

He had been aboard ship so long that the plain beneath his feet seemed to roll and pitch as he made the short walk to New Carthage, which sat on a hill. A bored guard asked his name and business. The fellow's lisping Ispanic accent did not trouble him; it was not much different from the flavor his own Greek eave the Emnier's other tongue.

He answered, "I'm Basil Argyros, a trader in garum out of the City." All through the Empire, Constantinople was the city.

"You've come a long way for fermented fish-sauce," the guard said, chuckling.

Argyros shrugged. "New Carthage's garum is famous around the Inner Sea. Would you be so kind as to tell me the way to the residence of the strategos? I'll need to discuss quantities, prices, and shipping arrangements with him."

The guardsman looked at his comrades, said nothing. Sighing, Argyros dug a handful of copper forty-follis pieces from his pouch and distributed them. After pocketing his share of the money, the soldier gave directions, adding, "You know, Arkadios isn't there. He's up north someplace, campaigning against the barbarians."

"Not doing too bloody well, either," one of the other guardsmen muttered.

Argyros pretended not to hear that, but filed the information away. He sauntered into New Carthage. The city was large and well laid-out, but of rather somer appearance because of the gray local stone from which it was

The gateguard's directions proved easy to follow. The strategos's headquarters was just up the main street from New Carthage's most splendid building, a church dedicated to the town's patron saint, who had been its bishop during the reign of the first Herakleios, seven centuries before,

"St. Mouamet, watch over me," Argyros murmured, crossing himself as he walked by the shrine, which was a smaller copy of the great church of Holy Wisdom in Constantinople. He found Mouamet one of the most inspiring saints on the calendar. A pagan merchant from the southern desert, he had come to Christianity in his middle years, on a trading voyage into Syria; and his conversion had been of a force second only to Paul's.

"There is no God but the Lord, and Christ is His Son," Argyros chanted softly: the first line of Mouamet's hymn celebrating his adopted faith.

It took a bribe of half a gold nomisma and an hour's wait to get Argyros admitted to the presence of Isaac Kabasilas, Arkadios' chief deputy. Kabasilas, a large, comfortable man with a large, comfortable belly, said, "Well, what can I do for you, fellow? Something about fish-sauce, my secretary said. He's really quite able to handle that sort of thing himself, you know."

"I would hope so. However -" Argyros glanced round. "- as we are alone, I can tell you that I don't care whether all the garum in New Carthage turns to honey tomorrow." He produced a letter, handed it to Kabasilas.

The official broke the gold seal. His jaw dropped as he read. "You're one of the Emperor's magistrianoi!" The condescension was gone from his voice, and the comfort from his manner.

"Only you know that, and I'd sooner keep it so."

"Of course," Kabasilas said nervously. Magistrianoi were secret investigators, sometimes spies. They reported only to the Master of Offices, and he to the Emperor. In theory Kabasilas outranked his visitor, but he knew what theory was worth. Wetting his lips, he asked, "What do you need from me?"

"If you tell me how the Franco-Saxons have taken eight fortresses and

three cities in the last year, I'll take the next ship out."

"Four cities," Kabasilas said unhappily. "Tarrago fell three weeks ago. In the field we match the northerners, but no walls can keep them out. The traders who escaped from Tarrago rave of sorcery ripping the gates open." He crossed himself.

So did Argyros; but he persisted, remarking, "Sorcery is something heard of more often than met."

"Not this time," Kabasilas said. "It's all of a piece with what's happened at other places we've lost. The Franco-Saxons must be in league with Satan. As if what they've done to us isn't enough, honest men have seen the devils

they've summoned - great red fiends, from the stories." The magistrianos frowned. Of course he believed in demons; after all, the Bible spoke of them. But he had never come across one in action, or expected to. Like most educated citizens of the Empire, he drew a firm distinction between the Outer Learning (most of it drawn from the pagan Greeks), which concerned this world, and the Inner Learning of Christian theology. It was disconcerting to find the line between them blurred.

"I think I'd better talk to these traders out of Tarrago myself," he said. "Where are they staying?"

Ioan's inn was a cheerfully ramshackle place that catered to merchants. The wine was good, the prices low to one used to those of Constantinople. In his guise as a seller of fish-sauce, Argyros sat in the taproom, listening to the gossip and spicing it now and then with the latest scandal from the capital.

He did not have to prompt to bring the talk round to Tarrago. The merchants who had got out of the city spoke of little else. But they did not tell him as much as he wanted; Kabasilas' summary had been depressingly accurate. The attack had taken place at night, which only made things

worse.

He learned the most from a tin-merchant from Angleland and his niece, who was an apothecary at a nunnery near Londin. Their lodgings in Tarrago had been close to the gate by the cathedral, through which the Franco-Saxons had entered. But even their account was vague: a roar, a cloud of vile smoke that seemed to cover half the city, and the crash of the locked gates going down to admit the enemy.

"We rode like madmen and got out by the northwest gate, the one next to the forum," said the merchant, a ruddy-cheeked fellow named Wighard, "and spent the night in the graveyard half a mile west. The Franco-Saxons

were too busy looting the town to go poking through old bones."

"Oh, tell him the whole story, Uncle," his niece Hilda said impatiently. She was a small, intense woman in her mid-twenties, with the startling gray eves and fair coloring of the northern peoples: no wonder the Emperor Maurice had called the Franks, Lombards, and other Germans "the blond tribes" in his military manual.

She turned to Argyros, "A squad did come out to look the necropolis over, but when they got close, Uncle Wighard rose up and shouted 'Boo!' They ran harder than we had."

Wighard said sheepishly, "What with their consorting with demons and

all, I figured they'd be even more afraid of 'em than I am!"

The magistrianos laughed and ordered more wine for the three of them. In Constantinople he had met only a handful of men from distant Angleland (he thought of it as Britannia), and their steadiness and ready wit had fascinated him. These two seemed cut from the same cloth.

It was only right for Britannia to be reunited to the Empire one day, as over the centuries Italia, Africa, Ispania, and part of the southern coast of Gaul had been, Somehow, though, Argyros was glad it would not be any vear soon.

Having found no real answers in New Carthage, Argyros bought a horse and rode north to see at first hand what the Franco-Saxons were up to

Arkadios' forces still held the line of the Eberu, but the magistrianos had no trouble slipping across the tiver. He did not worry about being in enemy-held territory. The blond tribes were savage in battle, but careless about every other aspect of warfare, including patrols. They had been so even in Maurice's time, before the days of Heraklein.

But they had something going for them, he thought as he rode past captured Tarrago. "Or what am I doing here?" he asked his horse. Unlike

Balaam's ass, it did not answer.

Argyros did not do any poking about at Tarrago; there were Franco-Saxons on the walls (none looking particularly demonic). He had expected troops there, the town having fallen so recently. But he was surprised and dismayed to find Barcilo also garrisoned, though it had been lost the autumn before. The barbarians looked to be coming to stay.

Empurias was another three days' ride up the Roman coastal highway — and proved full of soldiers, too. Argyros frowned again, not sure whether to strike inland or stay on the road that the first Caesar's legionaries had tramped. The highway promised to be quicker. He pressed ahead.

He rode past fields of fennel toward the Pyrenees, which loomed tall before him. Then the mountains were all around him as the road swung inland to take advantage of the pass of Pertuis. He met a band of Franco-Saxon armored horsemen clattering south into Ispania. Seeing only a lone traveler with nothing worth stealing, they let him by.

Not far from the fortress of Pertuis lay a victory monument set up by Pompey before the Incarnation. Seeing it stiffened Argyros' resolve. No less

than the ancient general, he had the tradition of Rome to uphold.

The late afternoon sun threw long, mournful shadows. The Franco-Saxons had not repaired Pertuis after they took it; apparently they planned to fix the new border further south. Argyros dismounted and led his horse through the yawning gateway into the courtyard. Better to spend the night there than in the open, he thought; the walls would hide his campsite from bandits.

The courtyard was full of rank grass. Argyros hobbled his horse and let it graze while he got a small fire going. He stretched till his joints creaked; then, taking bread, olive oil, and a skin of sour wine from his saddlebags, sat down by the fire for supper.

Something sharp dug into the seat of his pants (flowing robes were all very well in Constantinople, but not for serious travel). He raised up on one cheek, removed the offending object. He had expected a rock, but it was a potsherd, a triangle with the longest side about as long as his middle finger—a flat piece from the bottom of the pot.

He was about to throw it away when he noticed the potter's mark stamped into the clay: a cross flanked by the letters "S" and "G!" "St. Gall!" he said,

and looked at the sherd with a new and lively interest.

For one thing, the monastery of St. Gall lay in the Alps, far to the northeast of Pertuis. It was no great pottery center; why was one of its products so far from home! For another, Franco-Saxon monasteries interested Argyros professionally. Such learning as the barbarians had was confined to their clerics. And St. Gall was their chief monastic center, from which abbeys had spread all through the Franco-Saxon kingdoms. The magistrianos tugged at his beard. St. Gall might well be involved in whatever mischief they had concorted.

His examination of the potsherd made him certain he was on to something, even if he was not sure what. One side of the sherd was blackened, as if by fire. Yet that was the side that had been face-down; a pillbug was still clinging to it. It could not have been charred during the sack of Pertuis.

Argyros reproached himself for not making a thorough examination of the fortress when he rode up. Too dark now, he thought. The morning would have to do. He took out his bedroll, spread it on the ground, prayed, and slept.

He woke with the sun. After wolfing down more bread and oil, he walked round the overgrown courtyard, scuffing through the grass to see if he could find more bits of pottery. After a while, he did. They were all of the same vellow-brown clav as the first, and all scorched on one side.

He could still make out traces of a big scorch-mark near the base of one wall of the keep. He scrabbled through the matted grass there, and was rewarded with several more tiny shards. One, he thought, bore part of the "3" of St. Gall's mark. He grunted in satisfaction.

He also found a couple of fragments at the gateway, but learned less than he wanted there. The gates themselves were gone; the Franco-Saxons had burned their timbers.

He saw motion out of the corner of his eye: two horsemen approaching. He ducked back into the courtyard, clapped a helmet on his head, strung his bow, and slung a quiver of arrows over his shoulder. Having armed himself, he returned to the gateway and cautiously peered out.

One of the oncoming riders waved as he drew close enough to recognize Argyros. "You'll not find much garum here;" Wighard called. After a few seconds, Argyros saw that the tin-merchant's companion was Hilda. Her gilt hair was tucked up under a broad-brimmed hat and she rode astride like a man, but tunic and trousers could not disguise her small size or womanly figure.

The magistrianos emerged from cover, but did not set down his bow. "You don't have many ingots with you, either," he said.

"Left 'em behind when we got out of Tarrago, if you must know," Wighard said.

He was smiling. Argyros studied him. "I don't believe you care."

"Believe what you like," the Anglelander said keenly. He glanced toward

the ruined fortress of Pertuis. "Looks like a fair place to stop for lunch."

The sun was less than halfway up the sky. Argyros raised an eyebrow, but

kept silent.

Hilda stirred in the saddle. She remarked, "Back in Constantinople, his
Imperial Majesty Nikephoros must be displeased at the way the FrancoSaxons have violated his borders."

"I daresay he is," the magistrianos agreed politely. In fact, he knew the Emperor was furious. The Master of Offices had made that quite clear.

"Well, so is our good King Oswy," Wighard said, seeming to come to a decision. "And well he might be, for they ve used their foul sorcery on us as well as against you Romans."

"Have they?" Argyros said, pricking up his ears.

"Indeed they have. Their cursed pirates have sunk or taken more than a score of good Anglelander ships in the Sleeve this past year." That was the name the Anglelanders gave to the strait between Britannia and the Franco-Saxon lands. Wighard continued angrily, "No king will brook such an outrage for long, nor should he, even if the Devil is behind it."

"You sound very sure of that," the magistrianos said.

"Of course I am. We always sailed rings round the lousy lubbers before. What else but black magic could give 'em the edge now? King Oswy, God bless him, is certain of it, I can tell you."

"And so," Argyros said, making the connection, "you plan on inspecting

the stronghold here to see if you can find out how it's being done."

Wighard reddened. Hilda, though, looked the magistrianos in the eye. "Just as you've been doing," she challenged. "We're well met, I think." She was, Argyros thought, altogether too astute. He shrugged and nod-

ded. "We do seem to have a common interest, at any rate."

"So you are one of the Emperor's thegns, then?" Wighard said. Guessing at the strange Germanic word, the magistrianos nodded again. Wighard was also nodding, half to himself. "It thought it might be so, when I saw you here. Are we allies, then, in tracking down the Franco-Saxon's 'wizardry?' Arryros hesitated. If he could solve the puzzle, he was not at all sure he

wanted to share the answer with another nation of barbarians. On the other hand, the Anglelanders and Franco-Saxons were enemies of one another... and Wighard and Hilda might come up with a solution where he could not. That would be very bad. "We have a common interest," he repeated.

"If we do," Hilda said, lightly stressing the first word, "suppose you tell

us what you've found here."

A hardheaded young woman, despite her exotic good looks, Argyros thought. In her position, he would have asked the same thing, Saying, "Fair enough," he took the two Anglelanders around the fortress.

enough," he took the two Anglelanders around the fortress.

Wighard sucked in his breath sharply when the magistrianos pointed out the scorched wall of the keep. "The sign of hellfire, you say?" he grunted, touching a silver chain round his neck. Argyros guessed he wore a crucifix

or some relic under his tunic.

"Perhaps so, but I'd be more inclined to believe it came from St. Gall,"
the magistrianos said. He dug the broken piece of pottery from his beltpouch and explained how he found it and what he thought it meant.

He thought that would knock the Anglelanders' maunderings about demons over the head, but it did not. To Wighard, in fact, the connection even made sense. "Who better to call up demons than monks?" he asked. "If anybody could control the fiends, they would be the ones."

Argyros blinked; that had not occurred to him. He felt his picture of the world losing a little solidity. Who knew what evil the monks of St. Gall might work? They were heretics, after all, and capable of anything. "Suppose it is deviltry." he said at last. "What will you do then?"

"Me? I expect I'll be frightened enough to piss my pants," Wighard said,

"Mer I expect III be rightened enough to piss my pants, wignard said, shivering, "All I'm for is getting Hilda to wherever the answers lie, and keeping her safe afterwards. Once she learns the summoning-spells, Angleland will be able to use them too."

The magistrianos had to admit that had a certain logic to it. Dealing as

the magistranos had to admit that had a certain logic to it. Dealing as they did with drugs and potions, apothecaries like Hilda were the next thing to magicians. And who would suspect a slip of a girl of being a spy? He

hadn't himself.

Covering his stab of jealousy, he said, "To St. Gall, then?" The Anglelanders nodded. He went off to saddle his horse, resigning himself to weeks and probably months in the company of barbarians.

The journey was as wearing as he had expected: up the ancient Via Domitia across Franco-Saxon territory to Araus, the northwesternmost town in the reclaimed Roman province of Narbonese Gaul; then by boat north on the Rhodan to Vienne, and east along another one-time legionary highway to Agosta; from there by a lesser road, good only in summer, through the Pennine Albs: and then northeast to Turic and. after it, to St. Gall itself.

Long as the trip was, though, his companions made it fascinating in a way he had not expected. He sometimes found them so strange as to be almost from another world. The northerners he had known in Constantinople had been touched by Roman customs, and most did their best to ape them. Hilda and Wijbard had none of that wener.

They had not even come to Araus, for instance, when black, roiling, anviltopped clouds blew toward them, whipped by a harsh wind from the Inner Sea. "Storm coming," Argyros said.
"Ane." Withput said, builing a raincage out of his kit. "those're Thor's

"Aye," Wighard said, hauling a raincape out of his kit, "those're Thor's whiskers, right enough. I reckon the Thunderer'll be busy tonight."

The magistrianos had only gaped at him, too startled for speech. In the Empire, peasants in the countryside still clung to vestiges of their old pagan cults, in spite of priests' fuming. But Wighard was one of King Oswy's personal retainers, a man of higher rank in his country than Arrayros held in Constantinople. Yet he plainly took Thor as seriously as he did Christ and the Saints

But then, to the Anglelanders there were no sharp dividing-lines between everyday reality, rank superstition, and faith. Still uncomfortable with the notion of demons loose in the world, Argyros had scoffed at the idea while the travelers sat round a fire one evening, waiting for a couple of hares to finish roasting

Wighard's counterargument was of the "well, everyone knows" sort. Hilda, however, had what was by Anglelander standards a good education. and undertook a more reasoned reply. When she cited the Gadarene swine, Argyros conceded the point, but asked, "Is that truly meaningful today? I don't expect another Flood to wash us away in the fashion of Noah's, or the Sun to stand still in the sky as it did for Ioshua."

"Maybe not," she said, "but evil spirits are known much later than in scriptural times. What of the nun who forgot to cross herself in the monastery garden and so swallowed a demon along with her lettuce?"

"That's a new one on me." the magistrianos said, hiding a smile, "Where did you learn it?"

"It's in the writings of Pope Gregory the Great," Hilda answered proudly. "Oh." Argyros thought of the jest about Pompey; great as compared to what? Gregory had been pope some time after the reign of Justinian, and the heretical northerners still made much of his thunderings about the ecclesiastical privileges that were rightfully the see of Rome's. In Imperial eyes he was chiefly remarkable for having spent some years in Constantinople without bothering to learn Greek, and for fawning on the repulsive tyrant Phokas after he overthrew the Emperor Maurice and murdered him and his five sons

Yet despite the Anglelanders' rudeness of manner, the magistrianos came to value their company. Wighard might not have known his letters, but he had no trouble reading tracks. The snares he rigged from vines and branches rarely went empty, and he always knew what fish were likely to be in a stream. To an urban sophisticate like Argyros, that in itself was something like witchcraft.

And Hilda, for all her credulity about demons, was skilled at her chosen craft. When Argyros' back tightened up after long days in the saddle, she concocted a lotion from oil and various plants she searched out near their campsite: wild cucumber, centaury, fleawort, a couple of kinds of mint, and licorice root. Well rubbed in, it eased him remarkably.

The lotion's success and the praises he showered on her for it broke the slight wall of reserve that had existed between them. He began to treat her as he would a well-born Imperial lady of similar attractiveness, casually flirting, quoting the poets, and praising her with the fulsomeness of a practiced courtier.

Wighard found it all very funny, chuckling at each new sally. And Argyros

took Hilda's blushes and lowered eyes to mean what they would have from a woman of Constantinople: an invitation to continue. He did not really think anything would come of the game, but enjoyed it for its own sake.

Then one morning while Wighard was out checking his traps, Hilda came back to camp from a nearby stream where she had just bathed. Her clothes molded themselves magnificently to her still-damp body. Catching his breath, the magistrianos murmured the famous tag from the Iliad.

It meant nothing to Hilda, who knew no Greek. Argyros translated:
"Small blame to the Trojans and strong-greaved Achaeans for suffering for a long time over such a woman.' Homer was speaking of Helen, of course, but then he was not lucky enough to have met you."

She flushed and stopped in confusion. Argyros had been on the road long enough to cloud his usually keen judgment. He strode forward, started to draw her into his arms.

She kicked him in the shin, or tried to, for he slid his leg aside with the unconscious ease of a veteran warrior. She sprang away, fumbling for the small knife at her belt. Her eyes blazed as she spat out, "Did you take me for one of your loose Roman baggages, who lies down with a man at a whim?"

one or your loose Koman caggages, wno lies down with a man at a wimm? Since the answer to that was at least "maybe' if not "yes," the magistrianos prudently evaded a direct reply. Instead he apologized with as smooth a tongue as he had formerly used to compliment Hilda. All the while he was thinking that the strict morality which Tacitus had mentioned in the early Germans was still depressingly alive among their descendants.

Tacitus had also spoken of German women as sharing armed combat with their men. Seeing Hilda standing at the ready with her dagger, Argyros decided he believed that too. His ardor quite cooled, he went about the business of breaking camp in thoughtful slience.

That afternoon, when Hilda had gone off into the bushes by the side of the road for a few minutes, Wighard leaned toward Argyros and said quietly, "As well for you that you stopped when you did." He touched his bow.

"I daresay," Argyros agreed with a raised eyebrow: evidently the famed German chastity had more backing it up than mere moral force. "Still," the magistrianos added a moment later, "we could do worse than resting in a town tonight."

Wighard nodded, clapped him on the shoulder. "Aye, why not? Go off and get yourself a lively wench. You'll be better for it, and we'll all have less to worry about."

A practical people, these Anglelanders, Argyros thought.

En route to St. Gall were several daughter monasteries patterned after the original foundation. The travelers oldged at more than one, both because they offered safe, comfortable shelter and to get to know them: they were all as like as so many peas in a pod. And why not? The pattern was a splendid success. A space only 480 by 640 feet formed a self-contained community for 270 men. Argyros did not agree with the doctrines espoused within St. Gall and the other western abbeys, but he could only admire the genius of

the architects who had laid them out.

He passed himself off as a trader of amber with the pagan Lithuanians, calling himself Petro of Narbomart. The port on the Inner Sea was in the hands of the Franco-Saxons, he did not want to be known for an Imperial. Yet Narbomart's Latin dialect was close to that of Ispania, and easy for him to mimic. He could never have pretended to hail from northern Gallia. He could hardly follow that braying, nasal dialect, let alone hope to imitate it.

One Sunday he attended Mass at a monastery church with Wighard and Hilda, but succeeded only in making her angry at him just when she was starting to act politely toward him once more. The issue, naturally, was the ological. During the liturgy, Argyros stood mute whenever the word filiogue came up: the doctrine of the Imperial church was that the Holy Spirit proceeded from God the Father alone, not from the Father and the Son

Most citizens of the Empire did the same when traveling in those lands outside the control of Constantinople. It salved their consciences and, ninety-nine times out of a hundred, passed unnoticed by other celebrants.

Not here, though. As they were riding away, Hilda said bitterly, "I might have known you would go flaunting your heresy."

"My heresy?" the magistrianos shot back. "The fourth Council of Constantinople condemned the doctrine of the dual procession of the Holy Spirit as heterodox four hundred years ago."

"I don't recognize that council as ecumenical," she replied. None of the northern Christians did. When Heralkicos' grandson Constans II reconquered Italis from the Lombards, he had installed his own Bishop of Rome. The incumbent, of whose doctrines Constans disapproved, fled to the Franks, and the Franco-Saxon kingdoms and Britannia still followed that shadowy line of popes (so, clandestinely, did some folk in Ispania, Italia, and even Illyricum).

Hilda lifted her chin in challenge. "Convince me by reasoning, if at all." "Since you reject orthodoxy, suppose you convince me," Argyros said.

Wighard rolled his eyes and took out a wineskin. He had no concerns other than those of the world. Intricate religious argument, though, was meat and drink to the magistrianos.

And to Hilda, it proved. "Very well, then," she said: "The Holy Spirit, being of the Tirinity, is the Spirit of both the Father and the Son. Since They both possess the Spirit, He must proceed from Them both. The Father has the Son; the Son, the Father; and, since the Father is the principle of the Godhead — one might say, the essence of the Godhead — the Holy Spirit must proceed from the Father and the Son, completely from each Person."

"Whew!" Argyros looked at her in startled admiration. She argued as

acutely as an archbishop.

Wighard chuckled, a little blearily. He might not have cared about the dispute, but he was beaming with pride for his niece. "What do you say to that? Bright girl, eh?"

"Very." Argyros turned back to Hilda, giving her all his attention now, as if she were an underestimated swordsman who had almost run him through. He remained intellectually unpunctured, however, and counterattacked:

"You're clever, but your doctrine destroys the unity of the Godhead." "Nonsensel"

"Oh, but it does. If proceeding from the Son is the same as proceeding from the Father, it has no point. But if the two processions are different, the fact that procession from the Son is necessary implies that procession from the Father alone is insufficient - and thus that the Father is imperfect, surely a blasphemy. Also, ascribing procession to the Son as well as to the Father implies that the Father and Son share this attribute. If the Holy Spirit lacks it, then Son and Holy Spirit cannot be consubstantial, as the Persons of the Trinity must. But if the Spirit does not lack it, then what do we have? Why, the Spirit proceeding from the Spirit, which is absurd."

It was Hilda's turn to regard Argyros with caution. "That's not the defini-

tion of faith your precious Council gave."

"The Council was ecumenical, and tried to satisfy everyone," he answered, "even if it did fail with you. I accept its dogma; but as far as my reasons go, I have to please only myself."

"For someone not in holy orders, you're a keen theologian."

"After the hippodrome, theology has always been Constantinople's favorite sport," the magistrianos said. "Nine hundred years ago, St. Gregory of Nyssa complained that if you asked someone how much bread cost, he told you that the Father was greater than the Son, and the Son subordinate to Him; and if you asked if your bath was ready, the answer came that the Son was created from nothing. Of course there are no more Arians to uphold those views any longer, but -"

"- the principle still holds," Hilda finished for him. "So I see. Still, how

do you get round the fact that -"

Argyros went back to the argument, but with only half his attention. The rest was still chewing on Hilda's left-handed praise for his skill at dogmatics. In the Empire, knowledge belonged to those with the ability to understand, both the Outer and the Inner Learning. Whether one was lavman or cleric did not matter.

The northerners, he thought, lost a great deal by keeping learning so limited. Here was Wighard, a fine man and far from stupid, but half heathen and quivering at the notion of facing a demon. And even Hilda, though educated in religious matters, had none of the history, law, mathematics, or philosophy that gave perspective and produced a truly rounded individual.

He sighed. The Anglelanders were all he had to work with. Despite their

weaknesses, they would have to do.

. . . .

It was just past high summer, but the air of the pass through the Pennine Alps had a chill to it, and was so thin that a man or a horse started panting after the least exertion. As they started the last leg of the journey to St. Gall, the three travelers hammered out their plans.

Every mile closer to the monastery made Wighard less and less eager actually to set foot inside it. He kept making dark mutters about the forces of evil lurking there, and what they would likely do to anyone coming to sniff them out. When Argyros, exasperated, suggested that he stay outside and help when the time came for escape, he eagerly agreed, and at once grew more cheefull; it was as if a great weight was off his shoulders.

Secure in her own faith, Hilda had no qualms about entering St. Gall. Her task would stay what it had been before she fell in with Argyros: to search through the monastery's library, ostensibly to look for new medicines to bring back to Londin, in fact after clues to the Franco-Saxons' tame hellfire.

That worried the magistrianos — suppose she found the secret and kept it to herself? All he could think of to keep that from happening was to make himself such an obviously valuable ally that the idea would never occur to her.

He had every intention of going into the monastery himself. He could not hope to compete with Hilda when it came to pawing through old manuscripts. He could not even read some of the western book hands. But as a magistrianos he had other talents, interrogation among them. The Franco-Saxons liked to boast; no telling what some unobtrusive probing might bring out.

And then all their plans unraveled in Turic, a lakeside town a couple of days' ride west of St. Call. It was raining when they came in, a downpour that turned the dung-filled streets to a muddy, stinking quagmire. Argyros thought longingly of Constantinople's flagstones and cobbles — and of its sewers. Hild and Wishard seemed to notice nothing amiss.

All three of them were looking for an inn when Hilda's horse slipped on a patch of slime and fell heavily. She had no chance to kick free. The beast came down on her. Argyros heard the dull snap of cracking bone, followed an instant later by her stifled shriek.

When the horse, which was unhurt, tried to scramble to its feet again, Hilda's next cry was anything but stifled. Argyros and Wighard leaped down into the mud together. Wighard grabbod the horse's head and held it while the magistrianos freed Hilda's right leg—the one that was on top—from the stirrup. He shifted position, then nodded to Wighard. "All right—let him up, but slowly, mind."

"Aye." As the horse rose, Argyros cut the left stirrup-leather with his knife. Hilda sat up, clutching at her leg. Beneath splattered muck, her face was gray. She had bitten her lip in pain; there was a smear of blood at the corner of her mouth. "Stay as still as you can," Argyros ordered, using his dagger to slit her trouserleg. He saw with relief that no bone was poking through the flesh; in this filth such a wound would surely have rotted. But her calf was swelling as he watched, and he heard the break himself.

"Bad?" Wighard asked. Argyros told him in a few words. The Anglelander nodded. "Let's get her under a roof, then. I've set a few bones in my time." To Hilda he said, "I'm sorry, chick, we're going to have to move you. It'll hurt."

"It hurts already," she got out.

"I know, lass, I know." Wighard turned to Argyros. "We've nothing for a proper splint. I'll tie her legs together and we'll carry her. Lucky she's short;

we can keep her feet from dragging on the ground."

"Nothing better to do," the magistrianos agreed. Hilda gasped as they lifted her. Argyros could see her clamping her mouth shut against a scream. "Brave girl," he said; she was taking it like a soldier.

She managed the ghost of a smile. "See, I have my arm around you after

all, though maybe not the way you wanted."

Leading their horses, they started slowly down the street. By good fortune, there was a hostel close by. Its proprietress was a plump widow named Gerda. She clucked at their draggled state, but Argyros' good Roman gold softened her remarkably. A nomisma went much farther among the Franco-Saxons than in the Empire.

They eased Hilda down onto a table. Wighard produced a small leather bag full of sand and sapped her behind the ear. She sagged into unconsciousness. As he had said, her uncle knew how to treat injuries like hers. He skillfully aligned the fracture and splitted her leg between boards padded with rags. "She'll heal straight, I think," he said at last. "Maybe not even a limp."

"Good," Argyros said, and meant it; he honestly liked Hilda. But there was also still the mission to consider. He looked Wighard in the face. "We

need to talk, you and I."

In the end all three of them hashed it out in one of the pair of upstairs rooms they rented. Hilda lay on a straw pallet; Wighard and Argyros drew rickety stools up next to her.

"Do not think ill of me, I beg you," the magistrianos said, "but I plan to push on to St. Gall. If I wait for you to mend, Hilda, snow will close off the southern passes and lock me away from the Empire till spring."

"Quite right," she said. Her voice was blurry; she had drunk two winejars down to dull the fire in her leg. But her wits still worked clearly. "Uncle, you must go with him."

"And leave you here alone? Are you daft, girl?"

"This Gerda likes money," Hilda shrugged. "She'll care for me if we pay her well, I think; and I can make myself useful to her, doing accounts and such. No sense you staying here because of me."

"And what will I tell your father when he asks how I watched over you?"

"What will you tell King Oswy when he asks why Angleland has lost another dozen ships, or two, or three?" she retorted. "Winter will not wait for you any more than for Basil. I can be getting better while you and he go on; maybe when you get back I'll be able to travel again. And it's more likely you'll succeed working together than separately."

The Anglelander made a sour face. "Let me nose around town tomorrow," he said grudgingly. "If this innkeeper wench has a decent name for

herself, then maybe -"

On investigation, Gerda proved acceptable as caretaker for an invalid; her nickname in Turic was "Mother." "Yes, she likes her silver up front, does the Mother," said a miller who sold her flour, "but she'd not harm a flea,"

"That I know," Argyros said, scratching. But no hostel in which he'd ever

stayed, in the Empire or out, had been free of vermin.

Despite testimonials. Wighard was still fretting when he and the magistrianos rode east past the cathedral honoring Turic's three famous martyrs, Felix, Regula, and their servant Exuperantius. But he rode: Hilda's invocation of King Oswy's name might have been a spell in and of itself.

"Necessity is the master of us all," Argyros consoled his companion as they clattered over the old. Roman, fortified bridge to the left bank of the Lindimat. "What would you be doing for her had you stayed, past fetching

porridge and helping her use the chamberpot?"

"Nothing, I suppose; but I mislike it all the same." Wighard's eyes went to the foothills ahead, their flanks dusky green with thick forests of fir and pine. Bare gray granite, some peaks snow-tipped even now, loomed in the distance. The Anglelander shivered. "I'd not like passing a winter here, though."

"Nor I," Argyros said. Unspoken went the other thing that bound the two of them together: their common desire for the Franco-Saxons' secret. Without Hilda, Wighard would be hard-pressed to ferret it out for himself, and so depended heavily on Argyros. For his part, the magistrianos knew that if he could solve the mystery and get out of St. Gall with it, the Anglelander's less intellectual talents would make escape more likely.

Late the next afternoon, Wighard pulled off the road into a patch of

woods less than a mile short of the monastery. "Here I stay," he declared. "If you're bold enough to stick your head in the bear's mouth, why, go on and good luck to you. As for me, I give you ten days. After that I go back to Turic and see to Hilda."

Argyros clasped his hand, "You'll not be caught, or starve?"

"An old poacher like me? Never, I'd twenty times sooner brave the forest than chase after demons the way you're doing." He paused, eyed the magistrianos anxiously. "We still share, not so? Should you find the spell and I help you get away with it, we share?"

"If there's a spell to find, you'll have it from me," Argyros declared,

though his tongue was more certain than his heart.

He clucked his horse forward, Behind him, Wighard muttered, "I'd better," and followed that half-threat with low-voiced prayers - or were they heathen charms?

A brown-robed monk standing sentry on the wall hailed the magistrianos. That robe and the man's tonsure and shaved face reminded Argyros he was in a foreign land. The monks he knew wore black, kept their beards, and let their hair grow until it could be tied in a bun at the base of the neck

He shouted back, once more calling himself Petro the amber-trader. "You're faring all the way to Lithuania?" the monk said. "A long journey, that. May it be profitable for you."

"My thanks," Argyros replied, and asked if he might rest a few days at St. Gall. Receiving permission, he dismounted and led his horse into the monasterv.

A large guesthouse for nobles and other prominent guests stood to the left of the entrance road: to the right were a smaller house for their servants and a building that lodged the monastery's shepherds and sheep. All were of timber, in the northern style, with steeply pitched roofs to shed snow during the fierce mountain winters. The entranceway led to the western porch of the monastery church

where, Argyros knew, all visitors were received. The porch lav between two watchtowers, one dedicated to St. Michael, the other to St. Gabriel. The church itself was a basilica, long and rectangular. Most churches in the Empire were built to the more modern cruciform pattern, but the timberroofed stone building had an archaic grandeur; Argyros felt transported back to the early days of Christianity.

A monk emerged from the semicircular atrium of the church. He greeted the magistrianos with the sign of the cross, which Argyros returned. "Christ's blessing upon you," the monk said. "I am Villem, the porter. Tell me your name and station, so I may know where to lodge you."

Argyros repeated the story he had given the sentry. Villem rubbed his chin, "What shall we do with you?" he said with a thin chuckle, "You are neither noble nor pilgrim nor pauper. Would you mind the pilgrims' hospice?" He waved southeast. "It's just on the other side of the passageway to St. Gabriel's tower"

"Whatever you suggest. I'm grateful for the charity."

Villem bowed. "As best I can follow you, you're well-spoken." Latin was plainly not his birth-speech; he had a harsh Saxon accent. He shouted back into the atrium, "Get out here, Michel, you lazy good-for-nothing! See to the gentleman's horse."

"Coming, Brother Villem!" Michel was a freckle-faced novice with curly red hair and a look of barely suppressed mischief. Under Villem's glowering supervision, though, he greeted Argyros politely and took the horse's reins

152 AMAZING

from the magistrianos.

"This way, sir, if you please." He led Argyros south, past the tower of St. Gabriel and kitchen and brewery for the hospice on his left and the lodgings for sheep and shepherds and goats and goatherds on his right.

Several monks were busy overturning the dungheaps in both animal pens and going through the compacted dung at the bottom of each heap. Trying not to breathe, Argyros looked a question at Michel. The novice guffawed. "They're after the breath of the Holy Spirit," he said. Seeing Argyros did not understand, he explained: "Saltyter."

"The breath of the Holy Spirit, eh?" the magistrianos said. He also smiled. Monks were men too, and saltpeter was said to quench lust. "A

breeze that keeps the brothers cooled?"

"Huh?" Michel stared, then laughed again. "That too, of course." He shouted the joke to one of the monks working at the midden. The monk gave back a rude gesture.

The stableman and his assistant were obviously capable, so Argyros left them his horse and let Michel take him back round the corner of the stable to the hospice. "They'll feed you after vespers, when they light the hearth," he said. The magistrianos nodded agreeably. Michel gave a half-shy bob of his head and hurried away.

An eight-bed dormitory lay on either side of the hospice's main hall. The interior walls were only waist-high, to let heat from the hearth reach the sleeping-rooms. Argyros tossed his saddlebags on an empty bed, then thought better of it and put them on the floor. He stretched out on the bed himself

Several men were already in the hospice, some on their way to religious shrines and the rest beggars. About half spoke one Latin dialect or another. Argyros made idle conversation with them. Fortunately, none was from Narbomart to give him away: he did not know his pretended hometown well.

As dusk fell, he listened to the monks chanting the vespers service in the basilica. A few minutes later, as Michel had said, two came in to light the central fireplace. One bore a torch, the other a bucket of rags soaked in pitch. That perplexed the magistrianos until he noticed the hearth was full of charcoal, not wood; charcoal fires were always hard to start. But then he was puzzled all over again. None of the monasteries modeled after St. Gall had used charcoal, though they tolerated few discrepancies from one to the next.

The fire finally took light. The monks looked at each other, pleased with themselves. "Coals from the fire of the Father," intoned the one who had carried the rags — not in prayer, Argyros judged, but as a comment he was used to making. Nodding, the other monk went round the hall lighting tapers. A charcoal fire burned hotter than wood, but gave off no more light than glowing embers.

Novices brought in a tray of large loaves, one for each man in the hospice, and several crocks of beer. The bread was coarse and dark. It was half wheat flour and half rye, a grain Argyros had not known before this journey and one he did not much care for. He did not think highly of beer, either. A lifetime of wine-drinking made it seem weak and bitter by comparison.

As he ate, the magistrianos paid desultory attention to the chatter around him. Had it not been for his theological arguments with Hilda, he might not have noticed, but these monks of St. Gall had a curious way of relating homely things to the Persons of the Trinity. His eyes narrowed in thought. Eastern or western, monks had a taste for allegory — and if St. Gall was what he suspected, what better subject for allegory than its fearsome secret?

Emptying his mug, he turned to the man beside him on the long bench, a tall, thin beggar with the pinched cheeks and racking cough of a consumptive. He glanced around. No clerics were anywhere close. "So," he said casually, "if charcoal's the Father and saltpeter the Holy Spirit, what's the Son?"

He had all he could do to keep from shouting when the fellow promptly answered, "Must be that yellow stuff—what do you call it — sulfint, that's it. The healer burned some t'other day to try and clear my lungs. Didn't help much, far as I could see—just made a stink. But old Karloman called it the Son's own kindling." The beggar let out a bubbling laugh, a fleck of spit-tle at the corner of his mouth was tinged with pink. He said, "Father, Son, and Holy Spirit, eh? Funny I never thought of that myself."

"Crazy sort of Trinity," Argyros agreed. Wits racing, he did not hear when the beggar said something else to him. Maurice was right, he reflected; these blond barbarians still knew nothing of security. Why, the Empire had kept the make-up of its liquid fire a mystery for centuries, but St. Gall's secret was out after hardly more than a year. Charcoal, sulfur, salt-peter — there could be no other ingredients, or the monks would not have drawn the analose with the three Persons of the Godhead.

No demons, either, the magistrianos thought with relief.

It also occurred to him that here was a trinity where the spirit might indeed proceed from both the other two elements, for he was certain that charcoal and sulfur by themselves were harmless. In a sense, then, Hilda had been right — not, of course, that the products of this world were truly relevant to theology and its perfection.

He was on the point of springing from his seat and running for his horse when he realized he had not yet won the whole battle. He still needed to know what proportion of each constituent went into the mix. One part of wine in five of water was safe for two-year-olds, but five of wine to one of water would put a grown man under the table in short order. He dared not assume it was different here. He would have to stay a while longer.

Pilgrims, so long as they left with reasonable quickness, did not have to work for their meals; paupers did, Argyros worked before he was asked to.

He spent a dreary half-day cleaning the monastery henhouse and goosepen before the fowlkeeper found out he was good with horses and sent him to the stables.

He walked west, the monastery granary on his left hand and on his right a square wooden building of which its ripe aroma proclaimed it to be the monks' privy, Just beyond it was a similar but slightly smaller structure. A couple of monks crossed his path, carrying wicker baskets full of robes, tunics, and bed linens.

They went into the building next to the privy: the laundry, Argyros realized. His head snapped round to follow them — what would red cloth be doing in a monstery's washing? He was sure he had spied some, nearly buried though it was under drabber shades. He remembered the tales of scarlet devils who touched off the Franco-Saxon hellfire, and grinned to himself. A perfect discusse, he thought, and one that ought to settle Wishard for good.

The monks came out, their baskets empty. Argyros ambled lazily toward the laundry, wanting to get a better look at the devil-suits, if that was what

they were.

"Here, you, who are you and where do you think you're going?" someone barked at him.

He turned slowly, found himself facing a stocky, craggy-faced monk of about fifty, with hard, cold eyes. "Your Brother Marco told me to go help look after the horses," he answered, as innocently as he could. He could tell at once that this was no fellow to trifle with.

"Hmm! A likely tale," the other said. "You come along with me."

He marched Argyros back to the fowlkeeper, and scowled when Brother Marco confirmed the magistrianos' story, quavering, "It's just as he said, Karloman," He seemed more than a little intimidated by Argyros' cantor.

With poor grace, Karloman apologized to the magistrianos. "Get on with you, then, and no snooping about." Feeling the monk's eyes burning into his back, Argyros hurried past the laundry without so much as a sideways glance.

The stablemaster was a mine of gossip; Argyros learned every small scandal that had amused St. Gall in the past year. He did not, however, find out any of what he was after, and ended the day annoyed and frustrated, a condition which persisted most of the week. When his break came at last, it was, oddly enough, Karloman who gave it to him.

The magistrianos had been dreaming of roast goat and onions soused with garum, of smooth white wine from Palestine and the famous red of Cyprus, said to come from vines planted by Odysseus before he sailed for Troy.

Waking up to rye bread and beer was disheartening.

Then any thoughts of breakfast, however mixed, vanished from his head, for one of the beggars lay groaning in bed, staring fearfully at a fast-rising boil near his armpit. Men crowded away from him, and from each other. The terror of plague was never far away. Someone went pelting off for

the healer.

Argyros soon heard two men approaching the hospice at a run. He recognized Karloman's gruff voice at once. "Which one is he?" the monk demanded; his tonsure was gleaming with sweat. Before the man who fetched him could answer, he went on, "No need to tell me — that one grizzing over there, and I right?"

"Yes, sir."

The healer strode up to the terrified beggar. "Let's see it, Ewald," he said with rough joviality, but his patient was too frightened to raise his arm and have his fears confirmed.

"Grab him, you, you, and you," Karloman ordered, pointing. Argyros was the second "you." Along with a newly arrived pilgrim and the cadaverous man who had known about sulfur, he seized Ewald so the beggar could not wriggle. Karloman jerked the man's arm up.

The healer studied the eruption for a moment, then gave a shout of relieved laughter. "It's nothing but a common carbuncle, Ewald, you fool. I

expect you'll die in the stocks yet, just as you deserve."

"It hurts," Ewald whined.

Karloman snorted. "Of course it hurts. Stay there; I'll bring you an ointment to smear on it." He stomped out of the hospice, returning a few minutes later with a steaming bowl of what looked like honey but had a very different odor.

Ewald sniffed suspiciously. "What stinks?"

"You mean, besides you?" Karloman grunted. "This is half sulfur and half borax, mixed in hot olive oil. It'll draw the matter out of your boil. Ail Grab him again, you all!" Ewald tried to boil, but the men the healer had drafted were too strong for him. Karloman dipped a rag in the bowl, slathered his medicine on the beggar's cathruncle.

Ewald let out a pitiful wail. "It burns. I can feel it eating the skin off me!"

He squirmed like a worm on a hook.

"Oh, twaddle," Karloman said. As Argyros had already seen, he did not have much kindness in him, despite being a healer. He laughed again, this time unplessantly, "Now if you'd run across another, ah, potion, I dramed up a while ago, one suffur to four saltpeters and a charcoal, why that might just have taken the whole arm."

Ewald, horrified, nearly writhed out of Argyros' grasp. Karloman wheeled furiously, "What's the matter with you, merchant? Hold him tight, God curse you."

"Sorry."

Karloman was only making a rough joke to frighten the beggar a little. He could not have expected anyone there to take its full meaning, not even Argyros — his suspicion of him had been on general principles. But he had given the game away, and the magistrianos forgot what he was supposed to be doing and almost lef Evadid set losse.

After Ewald was finally medicated to Karloman's satisfaction, Argyros waited until the crowd had dispersed, then gathered his gear and slipped away for the stables. He had just finished saddling his horse when the stablemaster stuck his head in the door. "I thought I heard someone here," he said in a shocked voice. "You must not ride out now, not before Sunday prayers."

Argyros blinked. In the excitement over Ewald, he had forgotten it was Sunday. He walked to the church with the monk. After what God had

granted him this morning, He deserved thanks.

No lesser shrine could impress a man who had prayed in Hagia Sophia, but the church of St. Gall was not to be sneered at. Its proportions were noble, the colonnades that separated the two aisles from the nave fairly good work. Altars stood by every second column, all the way up to the transept.

The monks, of course, had the nave to themselves; laymen worshiped in the aisles, with wooden screens separating them from the clerics. Karloman and Villem the porter stood just on the other side of the screen from Argyros. Villem nodded pleasantly. "God with you, Petro," he whispered.

"And with you," the magistrianos replied, not missing his alias.

The healer did not waste time on small talk.

The Mass began. Argyros had been in the West long enough to follow the Latin version with ease and to make the proper responses. But he was so full of excitement over his discovery that he did not notice he was automatically omitting the filioque clause whenever it came up in the liturgy.

He also did not see Karloman's eyes widen when the monk caught his first omission, or narrow as he left out the offending word time after time. "A heretic!" Karloman cried in outrage, pointing at Argyros. The magis-

trianos's blood ran cold, "He rejects the filipque!"

And then the healer apparently remembered Argyros' unwonted curiosity about the monastery laundry, and his own inadvertent revelation of that very morning. He clapped a hand to his forehead. "A spy!" he shouted.

The choir went on for a few ragged notes, then fell silent. There was a confused, half-angry murmur from clerics and laymen alike. Karloman's

bellow cut through it: "Seize him!"

But Argyros had already whirled, and was twisting past gaping pilgrims and beggars. He cursed himself for the carelessness that had thrown him into danger at the moment of his success.

The consumptive pauper grabbed at his wrist as he dashed by. He struck

the man a blow that stretched him out groaning on the floor.

Two monks stood in the doorway that led out of the church's western porch. They were staring at each other, not sure what was going on. "I'll get

help!" Argyros shouted, which held one of them in place. The other had quicker wits. He sprang out to bar the way. He was slight, though, and in his late middle years. He went down like the beggar when Argyros lowered a shoulder and bowled him over.

The magistrianos ran out into the sunlight. He sprinted south past the tower of St. Gabriel for the stables. Having lodged in other monasteries modeled after St. Gall served him in good stead; he was more familiar with the layout of the place than he could have become in the few days since his arrival.

The sounds of pursuit rose behind him. Fortunately, nearly the entire monastic community had been in church. There was no one to answer shouts for help. Long legs flying, Argyros was some yards ahead of everyone as he reached the stable building.

Gasping thanks to the Mother of God for letting him get his horse saddled, he sprang onto the animal. By the time he spurred out the stable door,

he had his sword unshipped.

His pursuers were very close, but fell back in dismay at the sight of the gleaming blade. Almost all: Karloman, brave as well as clever, leaped forward to lay hold of the horse's reins. Argyros slashed, felt the sword bite flesh. Karloman fell. Argyros roweled his horse into a gallop, rode down another over-intrepid monk, and dashed for the monastery gate.

Karloman was not dead; Argyros heard him shouting, "Never mind me, you cretins! After him!" At the healer's bawled orders, monks ran to get weapons, saddle horses, turn loose the monastery hounds.

That command alarmed the magistrianos, but it was the last one he heard. Urging his mount ahead for all it was worth, he thundered through the open gates and down the road.

His horse's muscles surged against his thighs; the wind of its headlong gallop tore tears from his eyes. St. Gall's fields of wheat, rve, and barley blurred by on either side. Someone in one of the watchtowers sounded a horn. Argyros had no trouble guessing what the call meant.

To escape the all-seeing eye up there, he made for the woods, where he hoped Wighard was still waiting. A glance over his shoulder showed there was still no mounted pursuit. He let his panting horse slow from its sprint to a fast trot. If it broke down, he was done for.

He slowed again at the edge of the woods, to give his eyes a chance to adjust to the gloom. Silent as a shadow, Wighard stepped into the roadway. "Fine ruction you stirred up back there," the Anglelander observed. "D'you have the spell, man?"

"The answer, yes."

"Then we'd best not wait around, eh?" Wighard said, mounting and digging his heels into his horse's flanks. The magistrianos followed.

As soon as the road made a sharp bend, the Anglelander rigged a triprope. He grinned at Argyros. "They'll be coming hell for leather after you. With luck, this'll take out two or three and make the rest thoughtful."

"Splendid," Argyros said. He took a packet of finely ground pepper from his saddlebag and scattered it behind them. "The dogs will need distracting, too"

158

"Aye, so they will," Wighard agreed. "Best take no chances with 'em." After he and Argyros had ridden on for a few paces, he dug out an old rag and tossed it into a clump of brambles by the side of the road. Seeing Argyros' quizzical look, he explained, "Soaked in the piss of a bitch in heat."

The magistrianos burst out laughing. He heard the horn again, faint now in the distance. Thin as the buzz of summer insects came the monks' cries:

"Hurry there!" "Don't let him get away!"

Too late, Argyros thought — I've already done it. He and Wighard rode in companionable silence until they came to an icy stream — a young river, in fact — that eventually ran north into Lake Constant. They splashed along in the shallows against the current for a couple of miles to finish confusing the hounds (they had heard yapping far behind them a while ago, first agonized, then suddenly frantic).

When they were sure they were safe, they doubled back across country for Turic. Argyros was already thinking of the trip back to the Empire. It would be easy, save perhaps for the Pennine pass; the idea of a September Dizzard made the magistrianos shiver all over. The hostels in the pass bred big dogs to rescue stranded travelers, but they did not save them all.

The magistrianos thought for a moment that the chill against his throat was only a reflection of his reverie. Then he realized it was the edge of Wighard's dagger. "The spell, man," the Anglelander said hoarsely. "How do you summon up the demons?"

"There are no demons," Argyros said.

The dagger dug in. "You lying kern! I could fair watch you plotting to go your merry way without keeping your promise; but you'll not get away with that, not alive. Tell me how to raise the devils or I'll slit your weasand on the sor!"

Getting away with the secret all to himself had always been in the back of Argyros' mind, but the kiss of steel put an end to that scheme. He kept his voice as steady as he could: "Very well, then, here it is, just as I learned it: . . ."

The seasons spin round like wheels. By the Inner Sea, though, the turning is more gentle. Mellow autumn lay on Constantinople a month after snow had come to the Alps.

A toy fortress, its walls as high as a man's knee and three digits thick, stood in the center of a seculade grassy courtyard between two buildings in the palace compound. Argyros and an older, stouter man walked across the lawn to the miniature fortress. The magistrianos carried a small, tightly stoppered winejug in his left hand; a bit of oily rag protruded from a hole drilled through the center of the cork. In his other hand Argyros held a lighted torch. He was careful to keep it well away from the jug.

"I think we are finally ready to demonstrate this for you, your illustriousness," he said. "The craftsmen at the arsenal say the key to a reliable product is grinding all the ingredients to a fine powder before mixing." "Very well, my new Kallinikos, you've done splendidly thus far; by all means show me," George Lakhanodrakon said amiably. The magnitude of the compliment from the Master of Offices made Argyros flush; Kallinikos had invented the Empire's liquid fire.

The magistrianos set the winejug at a corner inside the model fort's walls. He stooped to touch the torch to the rag. Watching with interest, Lakhano-

drakon asked, "Now what?"

The flame caught. "Now, sir, we retire in haste." Argyros dropped the torch and loped away. The Master of Offices followed more sedately. Not only was he heavier than the magistrianos; despite descriptions, he had no real sense of what was about to happen.

Argyros turned his head to warn him to make better speed. Too late — at that moment, the flame worked down the rag into the wineiug. The explosion made his ears ring. The half-bricks from which the little keep had been built flew apart as if kicked. A tiny fragment of jug or brick stung Argyros'

neck. He yelped and rubbed at the spot.

And George Lakhanodrakon shot by, running as though the blast had hurled him forward. When no further thunderclaps came, the Master of Offices warily turned back to see the results of the experiment. His strong, fleshy Armenian face had gone rather pale.

The corner of the model where Argyros had nestled the winejug was utterly thrown down; the walls that had met there leaned drunkenly. The breeze was thinning the cloud of gray smoke, letting the great shouldering

bulk of Hagia Sophia dominate the northern skyline once more.

Lakhanodrakon licked dry lips. "It's like your first woman," he whispered. "All the telling in the world doesn't matter a damn." Arryros had out the echoing silence within the halls to either side down to

Argyros had put the echoing sience within the halls to either side down to the blast having stunned his ears; but it was real, brought on by startled people stopping dead. After a few seconds there were screams and exclamations: "What was that?" "Help me, St. Andreas!" — Constantinople's patron. "Earthquake!" "Mother of God, help me!" Faces appeared in a score of windows.

A squad of excubitores came dashing round the corner, gaudy in their clinging white leggings, silk surcoats, and golden torcs and belts. Each soldier's brightly painted shield was blazoned with the sacred labarum: & Brandishing their spears, they looked wildly in all directions until they recognized Lakhanodrakon. They crowded round him, pelting him with questions.

Argyros admired the way the Master of Offices pulled himself together and calmed the Imperial bodyguards without revealing anything of importance. They were scratching their heads as they went back to their post, but they went. One by one, the staring servants and officials in the palace buildings also decided the excitement was over and returned to work.

Eveing the wrecked model, Lakhanodrakon waited until everyone was out

of earshot. Then he said, "You really mean to tell me there's no witchcraft in that, Basil?"

"None whatsoever," Argyros said firmly.

"Astonishing to think of such destruction springing from such ordinary stuffs as charcoal, sulfur, and —" Lakhanodrakon snapped his fingers in annoyance. "I always forget the third."

"Saltpeter," Argyros supplied, adding, "The monks of St. Gall remember them by associating each with a Person of the Triune Godhead."

The Master of Offices frowned. "Barbarous heretics. Why would they do

"It does make a certain amount of sense, sir," Argyros said. "From what the men at the arsenals have told me, the saltpeter gives the explosion its blasting force: thus the monks term it the Holy Spirit's breath. The charcoal touches off the blast, and so they link it with the Father, the source of all things, while the sulfur catches fire from the kindling of the charcoal and ignites the saltpeter, just as the Son is the Father's Word through Whom He works."

"A blasphemous, unholy trinity if I ever heard one," Lakhanodrakon exclaimed.

"I agree."

After a few seconds, the Master of Offices said worriedly, "Even knowing how the hellpowder is made may serve us less well than I hoped when I sent you out, for how are we to defend against it? Why, even the walls of the city here, which have never been breached, might fall if enough of this villainous compound were set off beside them?"

"I suppose so," Argyros said, but he did not believe it. Theodosios II's magnificent works had survived nearly nine hundred years, and looked good for as many more. The magistrianos pointed out, "Now that we have the secret, with catapults on the walls we can give as good as we get, and the ditch in front of the city will keep enemies from coming up to the wall, and thwart undermining as well."

"That's so," the Master of Offices said, somewhat reassured. He fixed his sharp dark glance on Argyros. "Undermining, you say? I like that. One fine day we may give the Persians a surprise at Nisibis." The border between the Roman Empire and the successive dynasties ruling Persia had swung through Syria and Mesopotamia since the days of Pompey. Neither side could win the lasting victory both dreamed of.
Arrayros said. "The arsneal artificers say that olacing the explosive below

rily to said, it assume a more all the works to be attacked may prove even more effective than putting it alongside. They're thinking of mounting catapults aboard ship, too, as the Franco-Saxons are doing against the Anglelanders, to attack enemies at longer range than we can with fire and siphon."

"Ah, yes, the Anglelanders," Lakhanodrakon said. "True, they don't impinge on us directly, but I confess to misgivings over your co-operation

with them. Do you honestly feel such a, er, young folk should be trusted

with this potent secret you learned?"

"My lord, I puzzled over that from the Ispanic border all the way to St. Gall. One minute I would reckon them only ignorant barbarians; the next they would startle me with their courage or their native lore or even their wits, untrained but keen. I tell you frankly, I was of two minds."

"How did you decide, then?" the Master of Offices asked.

"When Wighard put a knife to my neck without warning and started growling of demons and spells, I knew they were savages after all. And since he wanted a spell, why, I gave him one. My barber swears it will grow hair; if the Anglelanders can make any military use of that, they're welcome to it. Wighard believed me; he judged me too frightened to lie. And in any case, how could he know the difference?"

Lakhanodrakon stared, then pounded the magistrianos on the back. "Well done, Basil, and quick thinking, too! That's one less worry for me."

He paused, running a hand across his own bald pate. "You must give me your barber's name."

"Why, of course, sir," Argyros said, carefully not smiling. "It would be a pleasure."

S' MAGIC

Acetylene, and sodium Oregano, and cream A monologuer's podium A silken nylon's seam

Laughing gas, and kerosene Candlewick, and taper A comely lad of seventeen Some cottage cheese, and paper

Pickled onions, finger rings Paper clips, and pie These, and many other things Will perk a witch's eye.

- Lorna Crowe

THE ULTIMATE NOVEL OF TIME TRAVEL AND TIME PARADOX,

WITH THIS NOVEL, JACK L. CHALKER JOINS THE COMPANY OF THE CLASSICS OF FRITZ LEIBER AND ROBERT A. HEINLEIN AND KEITH LAUMER.

WHEN YOU TRAVEL IN TIME, YOU NEVER KNOW

WHETHER YOU ARE GOING TO ARRIVE AS A CONTEMPORARY MALE OR FEMALE—OR HOW LONG IT WILL TAKE BEFORE THAT BODY AND THAT TIME DISSOLVE YOUR PERSONALITY SO

THAT YOU ARE THAT NEW PERSON.
TIME TRAVEL IS BOTH A TRIUMPH AND A TRAP!

JACK L. GHALKER DONING



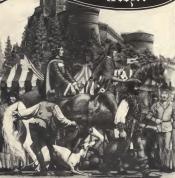
TOR BOOKS WE'RE PART OF THE FUTURE On Sale In April 0-812-53288-0 288 pages - \$2.95 "THE GRANDE DAME OF SCIENCE FICTION" (LIFE MAGAZINE) AND THE AUTHOR OF THE BESTSELLING HORSE CLANS BOOKS PRESENT STELLAR WRITERS IN A NEW WORLD OF MAGIC:

•ANDRÉ NORTON •MORGAN LLYWELYN

•C. J. CHERRYH • JO CLAYTON

AND OTHERS

Pagic In Ithkar



ANDRÉ NORTON AND ROBERT ADAMS

A TRADE PAPERBACK ON SALE IN APRIL 320 PAGES \$6.95 0-812-54740-3

TOR BOOKS & WE'RE PART OF THE FUTURE

is Courtesy

of the

dtsq0318 Collection

This Scan